GOVERNMENT OF INDIA.

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PROGRESS REPORT

OF

FOREST ADMINISTRATION

IN THE

CENTRAL PROVINCES, 1865-66.

BY MAJOR G. F. PEARSON, 33RD M. N. I.,

CONSERVATOR OF FORESTS, CENTRAL PROVINCES,

ACCOMPANIED BY A MEMORANDUM THEREON
BY DR. H. CLEGHORN,

OFFICIATING INSPECTOR GENERAL OF FORESTS,

AND THE ORDERS OF THE GOVERNMENT OF INDIA.

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FROM

THE SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

TO

THE CONSERVATOR OF FORESTS,

Central Provinces.

Dated Nagpore, the 26th June 1866.

SIR,

I am directed to communicate the Chief Commissioner's Review of your Report upon the operations of the Forest Department during the year 1865/66. As your Report will be printed and circulated with this Review, I am not to repeat the facts set forth by you ; but, following the same order of subjects as you have adopted, I am to record Mr. Temple's remarks and instructions.

2. The first subject is the *Survey and Examination of Forest Tracts.*

Northern Division.

3. It is doubtless correct that, in the Mundlah District and the Bijeragogurh tract, the boundaries of Government wastes have not been everywhere determined, and therefore your Department cannot yet demarcate finally the reserved Forests in those localities. But Mr. Temple has every hope that the Settlement Department will have finished this part of its work early next season, and then all the Reserved Forests of the Northern Division will be finally settled. He considers that the Gurrakotah Rumnah should certainly be retained as a Reserve ; and he notices with interest Lieutenant Douglas' remarks regarding the good prospects of young Teak in some of the valleys of Mundlah.

Eastern Division.

4. I am to observe that Lieutenant Plowden, before going on leave should have submitted a specific report upon the Forests in his Division. Mr. Temple has himself seen a part of the tracts, and he considers that Reserves might, with advantage, be formed there. If Zemindaree rights in the lands,

prevent your Department treating them as Government wastes; you might still take charge of the Reserves and manage them in the public interests, giving the landlords profits thereof to the Zemindars.

Centre Division.

5. Your remarks upon the injury done by Timber Contractors to some of the Forests in this Division are just. But I am to observe that owing to the circumstances of the opening of the Railway, the situation had become emergent, and there was at the time no alternative but to allow cutting, which, perhaps, may sometimes have been 'reckless.' But the emergency has now passed over, and the Conservancy Rules must be everywhere strictly insisted on.

Southern Division.

6. I am to remark that Lieutenant Noverre, Assistant Conservator of this Division, should have, after he had completed his work in connection with the Nagpore Exhibition, been more prompt in proceeding to the Forests. He has since then been diligently making up for lost time, and the report of his explorations has been received.

7. The next subject is the *Demarcation of Reserved Forests.*

Northern Division.

8. The question of Luchmee Persad's claim to the Forests of the Gogree Talook has been, settled by the Chief Commissioner, and the business of marking off the Gogree Reserve can at once be proceeded with. The arrangements proposed for demarcating the Toplah Saul Reserve will suffice for the present; but I am particularly to request that the verbal definition of the boundaries of this Reserve may be made very complete, so as to leave no room for question hereafter.

Eastern Division.

9. In regard to the Sahawa jungles where the Assistant Conservator desires to form a reserve, I am to observe that the Chief Commissioner does not understand how there can be anything to prevent the Forest Department selecting the Reserve pending the final demarcation of excess wastes. Even if private rights in any part of the Reserve interfere with the full operation of Forest Rules, your department can at least undertake management of the whole Reserve until the Settlement Officer finally decides upon the questions at issue. The Chief Commissioner desires also to record his opinion that the Dallec, Panabaras and Sunjaie Forests ought to be taken care of, even though they are distant from large marts; inasmuch as places now deemed inaccessible will in the course of a few years by the opening out of communications become comparatively accessible.

10. The Chief Commissioner considers that the list of Reserves given at your 43rd paragraph shows excellent progress in demarcation to have been made during the year. He hopes that *next* year's report will show that all the eight Reserves, now returned as undemarcated, have been completely marked off. I am also to observe that the "proposed" Reserve at Ootumghat, may be considered as sanctioned if your Department so desires.

11. The third subject is the "*Protection of Forests and work for their improvement.*

Northern Division.

12. The European Gardener intended for the plantations in this Division has now arrived, and the business of making plantations will doubtless be pressed on. With regard to Dhya cultivation and its prevention in the remote parts of Mundlah, the Chief Commissioner feels confident that the measures which have resulted in the almost total extinction of this practice in Baitool will eventually be successful in Mundlah. The Gonds certainly may be improved, but Mr. Temple has not much hopes of the Bygas. They are half savages with but a poor physique, and the efforts made to reclaim them have not been successful. The remarks in your 49th paragraph regarding the greater prospects which regular agriculture holds out to the Gonds of Mundlah are just; but it is to be remembered that our population, generally cultivate already a large area for their number, and they raise food enough not only for themselves, but also for exportation.

Western Division.

13. You remark that jungle fires have raged as usual in all the Reserves of the Western Division; with reference to this I am to observe that the Chief Commissioner will expect to hear of fire being more effectually excluded from the Reserves next year, though he knows that it can hardly be excluded altogether.

Puchmurree Division.

14. Lieutenant Doveton's remarks regarding jungle fires in our forests do, as you observe, carry weight. Still, Mr. Temple considers that we should continue to issue injunctions to the people, and he believes, from his own knowledge of their character, that they *will* attend *partially*, though not perfectly, to such injunctions.

15. Your 66th and 67th paragraphs have reference to certain changes in the establishment of your Department, regarding which a separate proposal should be made for the Chief Commissioner's consideration.

Dhya Cultivation.

16. The Statements in your 68th paragraph regarding the cessation in some places of Dhya Cultivation are of interest. But before adopting to its fullest extent your conclusion on the general question, the Chief Commissioner would wish

to be furnished with any facts at your disposal, which may show how far Gonds or others have really and actually substituted regular cultivation for Dhya

17. To your observations (paras 72-74) on the subject of Jungle fires, and the harm they may or may not do, the Chief Commissioner would only add that he has seen hundreds of places where these fires only scar, but do not kill, or permanantly damage the *larger* trees. Such trees are only killed when separately and specially set fire to

Jungle Fires.

18 The Chief Commissioner quite approves of the proposal that you or one of your Assistants should visist the Nellambore teak plantation during the current year. The early formation of teak plantations is of very great importance to your department and to the people of these Provinces generally. The plantations ought to *pay* within a very few years of their commencement, and they may ultimately prove very remunerative.

Plantations.

19. The Chief Commissioner quite agrees with you as to the importance of forming "babool" plantations in the plains of Nagpore and the Wurdah Hitherto their formation has not been possible, owing to Settlement operations being pending. But the completion of the Settlement will enable the matter to be vigorously taken up. You should keep yourself in communication with the local authorities on this very important topic.

20. In respect of the necessity for a more vigorous prosecution of thinning operations in the jungles when young teak is abundant, the Chief Commissioner has caused a separate communication to be addressed to you and to the Deputy Commissioners of Forest Districts drawing their attention to the subject.

21. The remarks under your fourth head, *Selection of trees to be felled and yield of forests* are full and interesting. The Chief Commissioner has nothing to add to them, save to observe that the permit to cut timber, granted to certain contractors, as alluded to in your 92nd paragraph, was only given on account of emergent circumstances relating to the opening of the Railway. As stated in paragraph 5 of this Review, the Chief Commissioner has resolved that conservancy rules shall not again be in any way relaxed.

22. The next subject is the "*Management of unreserved forests under District Officers*"

23. Taking the several Districts in the order adopted by you, the Chief Commissioner observes that very much has to be done before the arrangements for realizing forest revenue in the Jubbulpore and Mundlah Districts can be regarded as complete. The Commissioner has been specially

Jubbulpore Division

desired to expedite suitable measures for collecting forest dues on all produce of Government wastes which supply the city and suburbs of Jubbulpore. Taking all the Districts of this Division, the Chief Commissioner considers that the year's result show well for Saugor, Dumoh, and Seonee ; but poorly for Jubbulpore, and indifferently for Mundlah.

Chutteesgurh Division.

24. Though there are doubtless tracts of waste in this Division, (*e. g.* Sahawa, Lown,) which, on demarcation as Government wastes, will yield some, perhaps even a good Revenue from petty jungle products ; yet it is very doubtful whether there are any good timber Forests in the Khalsa (or Government) wastes of Chutteesgurh. The Chief Commissioner apprehends that Lieutenant Plowden must, when making the Report from which you quote in your 119th paragraph, have been confusing between Khalsa (or Government) wastes and those belonging to Zemindarees or Chiefships. The forests on these latter lands no doubt want conservation, but then they are not so well under the control of our Officers. However, we must try to establish a control and to make it tighter and tighter.

Nerbudda Division.

25. Items of Revenue such as those shown against Nimâr in your 122nd paragraph should not be allowed to remain uncollected. The Chief Commissioner quite concurs in your view that it is not desirable to settle Government wastes with neighbouring landholders at a fixed rate per acre. From all points of view it is better to invite landholders to bid for the leases of such waste tracts as they may require, in the same way as other lessees. The grant of blank permits to landholders, in the way proposed by Major Ashburner, cannot be allowed. The results of the year's work in unreserved Forests for this Division are considered by Mr. Temple, to show capitally for Baitool ; and fairly well for Nimâr and Hoshungabad. About Chindwarra the Chief Commissioner feels for the present doubtful, though he augurs well for the future.

Nagpore Division.

26. The arrangements whereby Forest dues in the Nagpore District were collected during the year, were certainly open to the objections urged in your 130th paragraph. This subject was treated of at length in the correspondence which resulted in the formation of the large firewood Reserve on the Southern face of the Sautpooras, whence the cities of Nagpore and Kamptee and the surrounding country draw their firewood, grass and petty jungle produce. During the current year revised arrangements will be in force, whereby forest dues are leviable on the edge of Government wastes, and the produce of private forests goes untaxed to market. The Chief Commissioner does not feel satisfied that the subject of leasing outlying blocks and plots of Govern-

ment waste and jungle has received full attention in the Nagpore District. On the whole he considers that the results of the year in this division show capitally for Wurdah, fairly for Chandah, and moderately for Bhundara. To the Nagpore district he hesitates to accord praise until it shall be seen whether a good system is established.

27. In respect to your other Paras 136 to 147, about Government Waste lands, Mr. Temple desires here to record the following remarks.

Unreserved Forests.

28. By the common law and the ancient custom of the country *all* land whatsoever (with certain specified exceptions) whether waste or cultivated really belonged to Government; and was technically leased out for periods short or long to Farmers; the terms of such leases being styled Settlements. It is plain that under that system the people had no certain tenure of land, no definite prospects, no assurance of reaping the fruits of their capital and industry.

29. But by the present or regular Settlement, the State has waived its proprietary right in favour of the landholders, respecting all calculated at and occupied land; and also respecting a certain quantity of Waste calculated as a liberal margin in addition. These landholders have now been declared the absolute proprietors (subject only to the payment of land tax) of all such lands. It were unnecessary to explain the magnitude of the boon, which by this free gift on the part of Government has been bestowed upon the people.

30. In regard to the remainder of the Waste (which of course forms a large and important area) the Government has *not* abandoned its proprietary right: but has reserved to itself in future the same control which it has always possessed. That Government has a perfect right to do this is indisputable. That this will be advantageous for the public interest in the time to come is manifest. For the present all these Government Wastes will be managed much on the same principle as heretofore; but the administration of them will become more firm and precise. The people will in no wise be debarred from taking whatever they want of the produce of such land. On the contrary they are welcome to take the grass, the fodder, the wood, the fuel, the fruit, according to their wont, or at their pleasure, on the payment of such dues or royalties as may be fixed thereon. Indeed the more they carry away of these things the better for the State Revenue. And so long as there is no waste or needless destruction; and so long as all rules are obeyed; the people, so far from being forbidden, should be encouraged to take their fill, so to speak, of the produce of the Government Wastes. Again, wherever leases, whether for usufruct, or for clearance, shall seem expedient, such terms may be freely conceded, in the same manner as heretofore, subject always to such rules as may be prescribed.

Lastly the State may and will dispose of such lands, when applied for by capitalists or settlers, under the Rules for the sale of waste land. In doing this, however, the Government will be asserting no more right than what has always been claimed, and has been enforced whenever necessary. Here again, such disposal of parts of the Government Waste will not sensibly curtail the advantages heretofore available to the people dwelling in the neighbourhood. For however numerous may be the purchasers who come forward, still they could not for very many years to come absorb more than a small modicum of the waste lands of the country: and thus there would still remain a really immense area from whence the people can draw supplies of all sorts of forest produce.

31. But not withstanding the manifest equity and moderation of the principles which have been acted on, there must doubtless be some landholders in every District who will profess dissatisfaction with the Rules in question. Some, appreciating the value present and prospective of the property both in cultivated and in waste land, already conceded to them, now perceive how advantageous a thing it would be, if they could only obtain the same title in respect to many square miles of waste in which their woodcutters may have sometimes worked, or their herds occasionally wandered. But when such nominal claims have been rejected on enquiry: no object of justice or policy would be answered in giving away the proprietorship of such wastes. On the contrary, if this were to be done, then the land would be made over to persons who could not work it, but who would hereafter make a profit by landjobbing and such like speculations at the expense of the public interest; and thus so far from any good being effected, a barrier would be causelessly erected to hinder the future improvement of the country. Again some may have on the preliminary operations of the Settlement, managed to include quantities of waste within their boundaries. A portion of such waste has perhaps been excluded when, as the operations proceeded, the surveys and measurements disclosed the real state of the case. The persons interested may feel disappointment; but that is inevitable. Again some landholders may have, in the absence of surveys or other means of correct information on the part of the authorities, contrived to get indirect control over waste land to which they had no real right. In such cases, after survey, the claims of the State are ascertained and the land is brought under proper management. In all places, and with all kinds of land, the effect of Survey and Settlement has invariably been to drag this class of cases into light. That the result should be the same here and that the individuals, whose unlawful gains were affected thereby, should lament, is hardly surprising. Lastly, many landholders when they first see waste areas, never before taken any account of, now carefully demarcated, imagine that the Waste is going to be formed into a vast State Reserve, and they become apprehensive as to whence free pasturage and other forest produce will

be obtainable. Others again, when they hear of a block of land here and there, out of this enormous area, being put up to auction and sold in fee simple fancy that there is going to be an influx of capitalists who will buy up all the wastes, and gradually overrun the country. It were superfluous to explain that all these fears arise from misconception : and that the people will be soon, indeed already are, undeceived, doubtless to their own satisfaction.

32. With regard to the date on which leases should commence the Chief Commissioner considers there should be one and the same date for all Districts. Separate orders have been issued to this effect. The question of clearance leases, I am to observe, should be kept distinct from that of yearly leases which grant only the usufruct of the annual products of Government wastes. The new rules for clearance leases, to which the Chief Commissioner has obtained the sanction of the Supreme Government, have issued, and all receipts under such leases will be credited as "Miscellaneous Land Revenue."

33. Your remarks on the small number of offences against Forest Law are interesting, and the Chief Commissioner concurs in thinking that (considering the limited means we have of enforcement and supervision) the general obedience which the people pay to Forest Rules redound to their credit.

34. In respect to the proper mode of crediting fines imposed under the Forest Act ; and to the legality of awarding to informers a portion of fines imposed under the Forest Laws, the Chief Commissioner has addressed to you a separate communication. He will also take into early consideration your recommendation that Assistant Commissioners should be invested with Magisterial powers for the trial of cases of breach of the Forest Rules.

35. Your sixth subject is the *Financial result of the year's Forest Administration.*

36. The Chief Commissioner considers the year's financial out-turn to be good ; the "creditor" side of the accounts shows 4½ lakhs for 1865/66 against 2¾ lakhs for 1864 65 ; the *real* uncollected outstandings of the year are only 30,000 Rupees against more than a lakh in the previous year. Striking out for both years the value of stock in-hand at the beginning of the year and also the sums realized on account of outstandings of previous years, the yield of the year 1865/66 is Rupees 2.50.000 against Rupees 2,05,638 in the year 1864/65. Your anticipations that next year's yield will be still larger seem to be well grounded ; and it is hoped that still more regularity in the collection of the outstanding claims of the Department may be secured.

37. With reference to the general remarks at your 176th paradraph, I am to request you will submit, for the Chief Commissioner's consideration, a separate proposal for attaching a good Surveyor to your department, and so arranging for the complete delineation of all forest tracts.

38. The Chief Commissioner concurs in the high commendation accorded in your 183rd Para to Lieutenant Forsyth for his good service while he officiated as Conservator. I am to request that an expression of Mr. Temple's cordial acknowledgments may be conveyed to Lieutenant Doveton and Mr. Jacob who have done excellently well; and that his commendation may be communicated to Lieutenant Douglas. He regrets that he is constrained to express dissatisfaction and disapproval in respect to Lieutenant Plowden and Lieutenant Noverre.

39. All the Civil Districts seem to have done more or less well as regards Forest Administration, except Jubbulpore which as yet shews but poorly; and Mundlah, which has done badly. Mr. Temple's special acknowledgments, are due to the following Deputy Commissioners who are named in the order of their merit in this Department according to his estimation,

Captain Twyford, of Baitool.
Mr. Jones, of Wurdah.
Lieut.-Colonel Maclean, of Saugor.
Mr. Read, of Dumoh.
Lieut.-Colonel Dennys, of Sconce.

40. An expression of the Chief Commissioner's special commendation should be conveyed to Mahomed Padshah, Forest Darogah, and to the Tehsildar of Bijeragogurh.

41. Lastly I am to express to you the Chief Commissioner's thanks for the complete and excellent Report now under review, and to add that since your return to India your supervision over all branches of Forest Administration has been as good as ever.

I have the honor to be,
Sir,
Your most obedient Servant,
C. BERNARD,
Secretary to the Chief Commissioner,
Central Provinces.

CHIEF COMMISSIONER'S OFFICE,
NAGPORE:
26th June, 1866.

FROM

MAJOR G. F. PEARSON,

CONSERVATOR OF FORESTS,

CENTRAL PROVINCES.

To

THE SECRETARY TO THE CHIEF COMMISSIONER,

Central Provinces.

Dated Nagpore, the 8th June, 1866.

SIR,

IN submitting the Forest Report for the past year I shall follow the arrangement of subjects suggested by Doctor Brandis, with the addition of a separate Chapter on the unreserved Forests under the management of District Officers. I shall first briefly note from the different Reports what has been done in each Forest Division under each Heading, and then offer my own remarks on it.

The following will be the arrangement of subjects :—

I.—Survey and Examination of Forest tracts little known.
II.—Demarcation of Reserved Government Forests.
III.—Protection of the Forests, and work for their improvement.
IV.—Selection of trees to be felled, and yield of Forests.
V.—Management of the Unreserved Forests under District Officers.
VI.—Financial Results.
VII.—General.

2. I should mention before proceeding further, that the Department has been under, the Officiating Conservator, Lieutenant Forsyth, during the whole of the past year, with the exception of the last two months, when I took charge again on my return from Europe, and that the whole plan and arrangements for working, as well as for the internal economy of the Department, originated with that Officer, and after my return were carried on without alteration by me.

1.—Survey and Examination of Forest tracts little known.

A. DIVISION.

3. The A. or Northern Division comprises the Saugor, Damoh, Jubbulpore and Mundlah Districts and part of Seonee, and is held by Lieutenant Douglas.

Forests examined with a view to the formation of Reserves.

4. In May and June 1865 Lieutenant Douglas examined the Jugmundel, Sugra Pahar and Mircheckona Teak Forests, as also the valley of the Bopmeyr in Mundlah, and settled finally the Reserved localities there, and thence proceeded on to the Saul Forests in Mowye, East of the Rajahdhar Ghat. In October he went again into Camp and visited

the proposed Reserves in Saugor and Beejoragogurh, and from thence went to Singarpore and the Duldulla Pahar in Mundlah, and the Deoree Forest in the North of Seonee: Also to the jungle tracts in Niwans and Burelah between Jubbulpore and Mundlah. The above shews an amount of travelling and exploration highly creditable to this Officer's zeal and energy, and he has been in Camp, without interruption from any cause whatever, during the whole of the year, except the very worst months of the Monsoon.

State of the Settlement Operations.

5. Lieutenant Douglas reports that in Saugor and Jubbulpore the Settlement Operations are nearly concluded and most of the boundaries of the Unreserved, as well as the Reserved Forests, have been finally determined and marked off. In Mundlah, however, as well as Beejoragogurh, operations are not sufficiently advanced to admit of this being effected, and accordingly only provisional demarcations have been made.

Condition of the Forests inspected.

6. The condition of the Garakottah Rumnah does not seem to be very satisfactory, but operations are now in progress for cutting creepers and thinning out some of the saplings. In the Tigorah Reserve in Saugor, Lieutenant Douglas states that all good timber has been cleared away by the Public Works Department in years gone by, and that it must be many years before this Forest in any way recovers its condition, which, except for the great scarcity of good timber in Saugor, would seem to me hardly worth retaining. But even now timber for Saugor is obtained from Rewah.

Beejoragogurh.

7. In Beejoragogurh the Settlement Officer has been furnished with a list of villages in which it is proposed to form a Reserve, and he is now directing his attention to carry out the necessary arrangements for making over the required tract to this Department.

The Mundlah teak Forests.

8. The Mundlah teak Forests in the Boomeyr valley *have been* among the best, and *are* among the most promising in these Provinces. The hills there are covered with a dense mass of Bamboo jungle, which protects the young trees from the scorching rays of the sun, and draws them up—besides which the Boomeyr and Motiaree Rivers which flow into the Nerbudda afford great facilities for water carriage from them to Mundlah. They are, however, nearly exhausted of large timber, though the young trees shew good promise, and there are very favorable sites in this neighbourhood for planting operations to be carried on.

B. DIVISION.

9, The B or Eastern Division has been under charge of Lieutenant Plowden as Assistant Conservator during the past year. He took charge just before the last Monsoon.

Selection of Reserves, Dullee Hill.

10. After the rains had ceased in November 1865, Lieutenant Plowden inspected the Dullee Hill in the Lohara Zemindaree of Raepore. He reports that "it contains valuable Teak, Saj, and other useful woods, and should be reserved." The account of it is somewhat vague. Here this Officer got a severe fever, and although he has remained out in Camp for the greater part of the season, he has never been able to shake it off, and is now obliged to proceed to Europe on Medical Certificate.

Kumtoora Saul Forest and Hateebaree Hill.

11. Lieutenant Plowden also inspected the Kumtoora Saul Forest and Hateebaree Hill, the former of which he reports as containing "an unlimited supply of Saul for future years," and the latter "about 800 or 1,000 trees of 4 feet in girth, and 2,000 trees of from 2 feet to 1 foot in girth." No Surveys for valuation seem to have been made, and this Officer's reports are too vague to be of much real value (in default of actual inspection) in judging of the quality of the Forest.

C. DIVISION.

Selection of Reserves and Settlement Operations.

12. The C. or Centre Division has been under charge of Mr. Jacob as Assistant Conservator during the past year. This Division extends from Deogurh in Chindwara along the plateau and slopes of the Sautpoora Range as far as Salee tekree in Bhundara, and having been thoroughly explored in previous years, nothing more remained to be done with a view to the selection of Forest Reserves, and as the character of the Forests is thoroughly known and has been fully recorded, no valuation Surveys were found necessary. The Assistant Conservator reports that the Settlement Operations appear completed wherever reserves have been established.

General Observations on the Forests.

13. As the jungles on the Southern face of the Sautpooras in this Division will always be the chief source from which building timber as well as firewood must be drawn for the large Cities of Kamptee and Nagpore, as well as for the wants of the dense population who inhabit the richly cultivated tract South of this great Forest belt, a large Reserve has been formed here with the sanction of the Chief Commissioner for the supply of these wants in future years; but such has been the devastation caused by the Contractors for the supply of Railway sleepers, that the Assistant Conservator recommends, and I entirely concur with him, that no pressure from without should be permitted to interfere with the strictest conservancy of the prohibited descriptions of wood for many years to come. The fact is, that at present scarcely a single tree of two feet in girth of the interdicted class exists. The wants of the people must be supplied by other sorts of wood, many of which, such as Tendoo, (Diospyros Ebenam), Mohin, (Odina Woodier), Lendya (Lagerstrœmia parviflora), Jamin (Engenia Jamboolana), Dowrah (Conocarpus Latifolia), are hardly at all, if in any degree inferior to the Terminalias which are at present so much in use.

D. DIVISION

14. The D. or Western Division which comprises the Western portion of Hoshungabad and the whole of the Nimâr Districts has been recently formed, and was under charge of Mr. Cox as Assistant Conservator since the middle of January last.

15. After taking charge, Mr. Cox inspected the Forests along the Taptee valley, and in the direction of Bhamgurh and Charwah, which are managed at present by the District Officer. But as these have been previously described in full, and as the inspection was for Mr. Cox's own information, it is not necessary for me to enter into a fresh description of them here.

E. DIVISION

16. The E. or Puchmurree Division includes the Baitool Forests as well as those in Hoshungabad and Chindwara which lie around the foot of the Puchmurree Hill. It has been under charge of Lieutenant Doveton during the past year.

New Reserves Selected.

17. All the Forests of this Division have been thoroughly examined and reported on in previous years. Two fresh tracts have been recommended for Reserves and Plantations; one of these tracts lies between the Sonebudr and the Puchmurries and being in fact a continuation of the Boree Forest is mainly of the same description. Its area is about 20 square miles. The other extends for about half a mile along the Towah near Ootem ghat, and is well suited for a plantation. It already contains very many fine teak saplings.

Progress of Settlement Operations.

18. The Settlement operations have been completed in these Districts

F. DIVISION

Examination of Forests little known.

19. The Officer in charge of the Division is Lieutenant Noverre. It comprises the South of Nagpore, Chandah and Wurdah. Nothing, so to speak, has been done here during the past year. Lieutenant Noverre the Assistant Conservator was employed on the Exhibition Committee till January; after which he remained in Nagpore till nearly the end of March partly on the sick list, and partly on work connected with the Exhibition. Early in April however he started by my order for the Panabarus Teak Forest in the South East of Chanda, about which it is most desirable that some reliable information should be obtained. It is my belief that there must be still much valuable teak left on the Hills extending from the head of the Baugnuddee Eastward in the direction of the sources of the Mahanuddee. There is no hope, however, of my being able to receive any report from Lieutenant Noverre from so far distant a locality in time for this Report

20. I had desired Lieutenant Plowden to proceed from Raepore in the same direction with a view of meeting Lieutenant Noverre, but the latter Officer was stopped by sickness and is now about to proceed to Europe.

II.—Demarcation of Reserved Government Forests.

A. DIVISION.

Demarcations accomplished.

21. In this Division the following Forests have been demarcated by Lieutenant Douglas during the past years.

District.	Name of Forest.	Approximate area in square Miles.	Approximate length of Boundary.
Saugor,...	Garakottah, ...	8	10
Do.	Tigora, ...	2	3
Mundlah	Sawaree Gogur, ...	6	10
Do.	Jugmundel and Sugra, ...	20	30
Do.	Mirchcekonah, ...	6	10
	Total ...	42	63

Saugor Reserves.

22. The Garakottah and Tigora Reserves are in the midst of cultivated areas and therefore I considered the boundary pillars as sufficient marks.

Mundlah Reserves.

23. In the Mundlah Reserves the boundaries have been defined in a temporary manner by heaps of stones and posts. It was thought better by Lieutenant Forsyth not to go to any greater expense, until Lechmee Persad's claim to the Gogree Ilaqua, which is now before the Chief Commissioner, be decided.

Toplah Saul Forest.

24. It is at present quite unnecessary to go to any expenditure in demarcating the Toplah Saul Forest, as the country is all but entirely without inhabitants—and its area is very extended, being about 300 square miles. The bounds of the Forest however shall be notified in the Gazette so as to prevent it coming under the waste land Sale Rules.

Deoree Teak Tract.

25. After an examination of the Deoree Forest in the North East corner of Seonee, Lieutenant Douglas is of opinion that the teak in it is not of sufficiently good quality to warrant the expense of forming a Reserve there. In this I entirely concur.

Proposed Reserves in the bend of the Nerbudda above Mundlah.

26. Lieutenant Douglas would advocate the formation of a Reserve on the Duldulla Pahar and near Singarpore in the bend of the Nerbudda above Mundlah. I have been all over these Hills in years past, but from what I saw of them, they were almost entirely cleared out, and what timber remained did not appear of promising quality. The young teak may possibly have come on since then, so as to justify Lieutenant Douglas in this opinion, and I quite think that there may be found some portions of Forest in the Burelah and Niwans pergunnahs which border on Jubbulpore, where the teak is of sufficient promise to admit of some expenditure in preserving it, especially as it is so near to the above named city. A further examination should be made in this direction next year, and such portions as may appear desirable shall be formed into provisional Reserves under Rule IV., for the purpose of being watched.

Teak plantations, proposed site for.

27. Lieutenant Douglas wishes to form his teak plantations for the A. Division in Mundlah along the Boomeyr river near its junction with the Halon. In this I entirely concur, as it is the site of some of the best old teak Forests of that District. They are now entirely worked out on account of the ready facility which has always existed for conveying the timber by water to a good market. I should recommend this in preference to plantations near the Silwa ghat which I at first thought of.

B. DIVISION.

Hatcebaree Hill.

28. In this Division Lieutenant Plowden has accomplished the demarcation of the Hatcebaree Hill Reserve with an area of 10 square miles during the past year.

Kumtoora Nullah.

29. He reports that he will send a man before he leaves for Europe to demarcate the Kumtoora Nullah, which will be accomplished before the rains: but as he has no subordinate in any way qualified to perform this important duty, I cannot consider that it will be done.

Reserves recommended.

30. Lieutenant Plowden recommends for reservation the following Forest tracts.

1. *Sahowa* a valuable Teak and Saul Forest on the Mahanuddee. This however the Deputy Commissioner reports cannot be touched under the terms of the present Settlement.

2. *Balode, Dullee Hill, Punabarus* and *Sunjaiee.* These Forests which have been leased out by the Deputy Commissioner to a Mahratta Malgoozar at Dhumterry are reported to contain much young Teak of good quality. Lieutenant Plowden states that there are 7,000 saplings in Balode and 10,000 in Sunjaiee, but gives no reliable data. The Deputy Commissioner however considers that the great distance of these Forests from any market would obviate their proving remunerative if preserved.

3. *The Western Slopes of the Jungle Pahar* which contain many good teak saplings.

31. The abovenamed Forests should be kept sight of, which perhaps may prove sufficient for the present; and a further examination should be made of their resources and the demand on them for timber, so that we may obtain reliable data to go on, before proceeding further.

C. DIVISION.

Demarcation of Reserved Forests.

32. Mr. Jacob has shewn the most thorough knowledge of what is required for this important work, as well as judgment and zeal in carrying it out, which he has done in a most effective manner.

Formation of the large Firewood Reserve for Nagpore.

33. Since last season the two Reserves of Durassee and Doongratal on the South face of the Sautpooras in the Seonee District have been connected together by prolonging the boundaries between them, so as to form one large Reserve for supplying building timber and Firewood to Nagpore, and this will be more convenient for purposes of conservation than several small patches of Forest. The connecting portion of forest added to the Reserve here is about 15 square miles with a running boundary line of about 25 miles.

34. In addition to this it was found advisable to extend the Durassee Reserve as far as the Road running from Seonee to Kuttinghee, which now forms its Eastern boundary on the Ghat Range. The boundary after quitting the road is again carried into the old line near Bisapore, and includes an additional area of about 45 square miles, with a running boundary of 25 miles.

35. Westward, into Chindwarra, the Reserve has been extended on the right bank of the Pench River as far as Doodgaon and Nagulwaree with an area of 45 square miles and a boundary line of 40 miles.

36. Along the whole of the boundary of this Reserve a path 15 feet in breadth has been cleared by Mr. Jacob, and well defined marks consisting of heaps of stones with strong teak posts in the centre, and whitened posts on their top, have been set up. The erection of permanent boundary pillars has been rendered unadvisable owing to the demand for Masons on the Korye ghat works and consequent expense of skilled labor in the country. The work of demarcation has been one of great personal labor and constant exposure for Mr. Jacob and those engaged in it under him, from which I regret to say he has not altogether escaped without sickness. The season has been especially trying from the great want of water in the jungles.

37. The whole of the above will now form the great Firewood Reserve for Kamptee and Nagpore. The area is about 315 square miles, and the total length of its boundary line about 230 miles. A Map of the Reserve is appended to this Report and marked A.

Area of the Reserve.

38. In addition to the above, fourteen jungle villages in the South of Seonee District have been taken up as a Provisional Reserve under Rule IV for the protection of Satinwood (Chloroxylon Swietenia) which is in considerable demand for various purposes in the Nagpore Arsenal, and which is found of good growth in those localities.

Provisional Reserve for Satinwood.

D. DIVISION.

39. There has not been perhaps so much completed as might have been desired in this work, but it has been owing to unavoidable circumstances. Mr. Cox was quite new at Forest work when he joined the Department, and unfortunately on returning from his inspection of the Bhamgurh Forest he met with a severe sprain which prevented his putting on a boot for a considerable time. Since, however, I went down to Hoshungabad myself and put him in the way of what he had to do, he has been out in the Forest, and with the assistance that the late Officiating Conseravtor (who is now Settlement Officer in Nimâr) kindly gave to the work, the Southern boundary of the Poonassa Reserve on the Nerbudda in the North of Nimâr, in length 30 Miles, has been completed before the date of this Report, as well as a great portion of the Kaleebheet Reserve on the Taptee, which comprises an area of 120 square miles with a boundary of 52 miles. The Northern boundary of the Poonassa Reserve is at present the Nerbudda, and cannot finally be determined until the exchanges of Territory with Holkar are decided. I trust that before the rains, Rajaboraree will be marked off also, which will complete the Reserves in this Division.

Demarcation of Reserved Forests.

E. DIVISION.

40. No fresh demarcations have been made, as all were completed last season, but some of the boundaries were more clearly defined and improved, and 35 Miles of boundary in the Bowergurh Forest have been thus completed.

Demarcation of Reserves.

F. DIVISION.

41. No work in this Divsion.

CONSERVATOR'S REMARKS.

42. There have been some modifications made in the number and area of Reserves since last year. The following is a corrected list as it stands at present.

A. DIVISION.

I. Garakottah Rumna (demarcation finished)
II Tigora Do.
V. Sawaree Gogurh } Do. but lines not cut, pending decision of Chief Commissioner.
VI. Mircheekonah }
VII Jugmundel Do.
VIII Bijoragogurh (not yet demarcated)
IX Toplah Do.

This Decision has now been given under para 8 of Chief Commissioner's Review.

In this Division the Heerapore jungle No. III of the old list has been left in the unreserved Forests under the District Officer, and plantations on the Boomeyr in Mundlah will be substituted for those on the Silwah Ghat Nullah, which, in the old list, stands as No. IV.

B. DIVISION.

I. Hatcobaree Hill (demarcated).
II. Kumtoora Nullah (not demarcated).

C. DIVISION.

I. Great Sautpoora Reserve (demarcated).
III. Sonawanee (in course of demarcation not yet completed)
V. Deogurh (not yet demarcated).

No. I. comprises Nos. I, II and IV of the old list, which with large additions have been thrown with much advantage into one reserve.

D. DIVISION.

I.	Rajaborarce	- -	(not completed.)
II.	Kaleebheet	- -	(demarcated)
III.	Poonassa	- -	(do.)

E. DIVISION.

I.	Boree	- -	(demarcated.)
II.	Sowloegurh	-	(do.)
III.	Jamgurh	-	(do.)
IV.	Deinwah valley	-	(not yet do.)
V.	Kuttungee - -	-	(do.)
VI.	Ootumghat Plantation	-	(Proposed Reserve not demarcated.)
VII.	Sonebudr Reserve	- -	(ditto)

The Taptee Reserve No. IV of the old list has been left in the Unreserved Forests, as on further examination it did not prove worth reserving, and two tracts in lieu of it have been applied for on the Towah and Sonebudr, as in every respect better and more easy of access, and they will be demarcated next year.

F. DIVISION.

I.	Mohrlee	- - - - -	(not demarcated.)
II.	Dhaba	- - - - -	(do.)
IV.	Ashtee	- - - - -	(do.)

The Kailghur firewood Reserve No. III has been abandoned for special reservation as the Great Indian Peninsula Railway have decided not to employ wood, but only coal on their Engines.

43. After the modifications that have been made in the Reserves there remain now XXV distinct tracts, of which five were finally demarcated previously, and eight more have been finally marked off during the year under Review. Two are in the course of demarcation at present, while those not yet touched are comprised in the following list :—

TO BE DEMARCATED NEXT YEAR.

1.	Beejoragogurh	- - -	A. Division.
2.	Kumtoorah Nullah	- -	B. Division.
3.	Deogurh	- - - -	C. Division.
4.	Ootumghat	- - -	E. Division.
5.	Sonebudr	- - - -	E. Division.

6. Mohrlee - - - - F. Division
7. Dhaba - - - - F. Division.
8. Ashtee - - - - F. Division.

Not requiring demarcation at present.

1. Toplah Saul Forests
2. Deinwah valley Do.

Previously demarcated - - - - - -	5
Demarcated during past year - - - - - -	8
In course of demarcation - - - - - -	2
To be demarcated next year - - - - - -	8
Not requiring demarcation at present - - - -	2
Present Total of Reserves -	25

There is some confusion in the number of Reserves said to be demarcated in the last report, owing, I think, to the demarcation work being in active progress while the Report was being written. The present list however is correct.

III.—Protection of the Forests and work for their improvement.

A. DIVISION.

Jungle fires.

44. Lieutenant Douglas reports that every effort has been of no avail to keep the fire out of the Mundlah Reserves; but that in Garakottah and Tigora, which are in the midst of cultivation, no fires have occurred.

Garakottah Rumnah.

45. In Garakottah two Surveys were made to ascertain the probable contents of the Rumnah, and the trees were carefully counted. The result is appended and marked. (B). It shews a probable amount of about three quarters of a million of teak trees in the Rumnah, divided in the following proportions :—

II.—Class trees ½ per cent.
III.—Class trees 37½ per cent.
IV.—Class trees and saplings 62 per cent.

Plantation Work.

46. Besides clearing and thinning operations the following is a return of the plantation work done in this Reserve during the past year.

Name of Tree.	Number of plants in Nursery	Number planted out up to date
Teak	300	2251
Kowah	30	60
Pinas longifolia	124	...
Acacia Melanoxylon	70	...
Encalyptus gigantea	69	...

Lieutenant Douglas reports well of all these plants especially of the Pinas longifolia, which will be planted out at the commencement of the rains. He seems, however, to think

that neither the teak seedlings which were planted out last year, nor those of previous years, have made as much progress as they ought to have done.

European Gardener.

47. I trust that if the European Gardener is allowed to remain here for one year, he may be able both to instruct the subordinates thoroughly in the work of forming nurseries and planting out the seedlings, and also to put the whole of this valuable rumnah into thorough good order. It must however be many years before it can give much timber of any size adequate for large works, as will be seen by a reference to the Report of its contents in a preceding Para.

Dhya Cultivation.

48. Dhya cultivation seems to flourish still a good deal in the remoter portions of the Mundlah District. Lieutenant Douglas thinks (and I entirely concur with him) that when the Settlement operations are more advanced, and the jungle wastes cut off, some pressure may be put on the Gonds and Bygars to make them give up this distructive practice and take to regular cultivation, as has been the case in Baitool and other parts of the Provinces. Of course this will be much more difficult to effect in these remote localities, but it is a grievous fact when prices are ranging as high as they do now in Central India, to see the rich plains along the Boomeyr and the Halon lying waste and uncultivated when they are so well adapted to grow Wheat, Cotton and other valuable crops. Lieutenant Douglas seems to think that the tapping of the Saul trees in Toplah for resin has been as a general Rule put a stop to.

Working of the Establishments.

49. The Native Establishments in this Division have worked well during the past year, as the result of their operations shews. Lieutenant Douglas reports exceedingly well of Darogahs Shekh Mohideen and Mooneer Khan; both of these men have had very hard work. Shekh Mohideen has been most active in getting out timber from the Forests and floating it down to Jubbulpore in the rains; while catching the timber at the Goaree ghat depot when floated down is a work which requires untiring vigilance and much exposure, and the fact that no wood has been lost in this operation, I consider, reflects great credit on Darogah Mooneer Khan.

Protective arrangements generally.

50. The protective arrangements of this Division work well and appear sufficient.

Measurement of trees to ascertain their growth.

51. 26 trees have been measured and registered by Lieutenant Douglas for the purpose of observing their growth.

B. DIVISION.

Conservancy arrangements.

52. Lieutenant Plowden reports that all grass has been removed from the timber which has been felled and collected in his Division; but that from the very small Establishment at his disposal he has been unable to effect any other conservancy arrangements. As yet only one Forest Reserve of 10 square miles has been demarcated in this Division, and after the revised scale of Establishment has been sanctioned, a fresh scale of Establishment in proportion to the requirements of the District will be allotted to it.

Plantations.

53. No plantations have been commenced, but Lieutenant Plowden recommends the valley of the Jonk River as being a valuable site for one.

C. DIVISION.

Protection of the Forests from fire.

Teak pruning and thinning.

54. From the extent of the Reserves no attempt has been made in this Division to keep out the Jungle fires. Teak pruning has not been carried out by the Assistant Conservator as he considered that it would be an advantage to leave the saplings to grow for another year before attempting to thin them.

Protective arrangements.

There are moreover only four Duffadars, each with two Peons to assist them, who have been sufficiently employed in looking after the Railway Contractors, and cutting jungle boundary lines.

Dhya Cultivation.

Mr. Jacob reports that Dhya cultivation is not now carried on to any great extent on the South face of the Sautpooras except in Sonawanee, where it can do but little harm. I am glad to hear this, as it shews that the measures which have been taken with a view to its gradual suppression, have been effective to that end.

Plantations.

No measures have been taken as yet in this Division for the formation of teak plantations, but this important work will be taken up, now that there will be more leisure to attend to it.

Measurements taken to ascertain the rate of growth of trees.

55. Mr. Jacob states that he has during the past year measured and registered a number of trees for the purpose of watching their rate of growth, but that as yet sufficient time has not elapsed for their re-measurement.

D. DIVISION.

Jungle fires.

56. The Jungle fires have raged as usual in all the Reserves in this Division. Indeed the demarcation not having been completed, there was no chance whatever of any other result.

Teak thinning.

57. No teak thinning has been done here during the past year.

Protective arrangements.

58. The Darogah and Staff are generally efficient in this Division, and I consider them sufficient for the work required.

Plantations.

59. Sites have been selected for plantations near the Taptee in Kaleebheet, where the young teaks shew admirable promise, and a large quantity of seed will be collected next season with this view.

E. DIVISION.

Protection from fires.

60. There was a path 20 yards broad cleared of grass round the Boree Forest last year, and Lieutenant Doveton reports that the great efforts he has made to keep fire out of it have been so far successful, that as yet no fire has broken out there this year. This was a most important matter from the amount of valuable old teak lying felled in the Forest. In all the other reserves in this Division the usual fires have raged as usual. On this subject Lieutenant Doveton writes as follows, and as he is without doubt the best practical Forester we possess in the Department, his remarks should carry much weight. "Last year it seemed that cautioning the villagers had in some measure had the desired effect of stopping this destructive practice; I fancy however that the people have since discovered the utter impossibility

" of their being detected in offences of this kind ; for immediately after the Hooli festival " this year the whole of the Forests were set on fire, and the conflagration was so general " that any attempt to stop it would have been utterly useless. I do not think that any " thing can be done at present for protecting these tracts from fire without expending a " large sum of money. This I would on no account recommend, for although portions of " these tracts are well worth preserving, yet there are only small patches on which it will " ever pay to lay out money in protecting them from fires. The selection of these small " tracts will of course be a work of time, but it will be begun at once, and propositions for " protecting them submitted hereafter."

Teak pruning and thinning

61. But little has been done in this matter partly because the amount of teak poles cut by Malgoozars in the village areas made over to them by the Settlement Department precluded the hope of the Forest Department being able to do so at remunerative rates, and partly on account of the continued ill-health of Mahomed Padsha the Baitool Darogah. Next year more attention will be paid to it.

Cutting of teak stumps and collection of logs lying about the Forests.

62. Much work has been done in the way of clearing the Forests of timber already felled and lying about in danger of being burnt. In Boree 3,600 teak logs were thus collected at the Depots. In the Bowergurh Reserve of Baitool 1,620 logs and 1,560 sleepers, and in Sowleegurh 525 logs, besides 1,500 sleepers. All teak were collected also. The cattle disease which has raged in these Districts has greatly stood in the way of the Forest work ; if it had not been for this, much more would have been effected, but 16 out the 30 Government buffaloes were *hors-de-combat* from it, out of which 6 died, while it was impossible to procure animals at all for hire. Two of the Darogahs were also sick for five months of the year and unfit for work.

Road making.

63. The Road from the Boree Forest to Bugra has been completed for Rupees 937-7-4; this is a most necessary work, and will fully double the value of the timber in this Forest, which before could not be got out without the greatest labor and expense. Carts can now proceed along its whole length.

Clearing Creepers

64. In the Boree Forest a large number of trees have been cleared of creepers.

Working of the Establishments.

65. Lieutenant Doveton complains bitterly of the want of men to act in the place of Darogahs when the latter fall sick, and the fact that two Darogahs were sick for near five months has proved a most serious hindrance in prosecuting the Forest work in this Division during the past year. Men of a class who are fit for this position will not enter the Department on the pay of Duffadars, and I think that no provision for the supply of this want in the Revised scale now before Government is a serious omission. Duffadars on 20 Rs. a month will not be sufficient to meet the want. I would recommend at least six Jemadars on from 25 to 35 Rupees a Month being added to the Establishment. The Revenue can well bear this additional charge, and if some provision of the sort is not made, the work will some day come to a dead lock. The effects of malaria are beginning now to tell severely on several of the best men who entered the Department five years ago, and some of them as) Mahomed Padsha) must go away before long, if they are to save their lives.

66. Lieutenant Doveton also complains of the uselessness of the class of men we get as Duffadars in the Department. This is very true, but is unavoidable in a new Department. Every year as the work goes on, men fitted for it will turn up. He also complains of the impossibility of obtaining decent Watchers and Peons on 5 Rupees a month. This is also quite true; but applies equally to every other Public Department. These men ought to be divided into classes, and to get 6 7 and 8 Rupees a Month respectively.

Duffadars.

67. This has of course been strictly prevented in the Reserves, but still exists in the unreserved Forests to a certain extent, Regarding this practice Lieutenant Deveton most truly remarks "The Rules regarding Dhya 'cutting cannot be too strictly enforced, as the only plan which will induce the Hill "people to take to regular cultivation," a remark which will be endorsed by every officer acquainted with the subject. I am happy to think our efforts have been as successful as they have already proved in this matter.

Dhya cultivation.

68. Arrangements have been made for a plantation on the Taptee near Jowra; on the Machna above Shapore; and on the Towah about Ratakhas. The greatest care has been taken in selecting good seed, and it is to be hoped that the result will be satisfactory.

Plantations.

69. Lieutenant Doveton regrets having lost the Memorandum he had made of measurements to ascertain the growth of timber. Fresh measurements however have been made and registered for future observation.

Measurement of trees to ascertain rate of growth.

F. DIVISION.

70. No work.

Conservator's Remarks.

71. I have done my best to impress on my Assistants the necessity of endeavouring to keep fires out of the Forest Reserves. I believe the attempt to be utterly hopeless except in very small patches of Forest, or at an expense which would be so great that Government would never consent to it. The grass becomes so exceedingly dry on the arid hills and ravines of the Sautpoora range that one spark will ignite it, and when once alight in May, no power on earth will arrest its progress if a high wind is blowing at the time, much less will a path 15 feet broad keep it from extending into the Reserves. The temptation on account of obtaining the young grass for the cattle is so great, and the chance of detection so small, that it is hoping against all hope to expect that some one will not commence the mischief, even if accident has not caused it previously and the fires are often caused no doubt by travellers carrying fire sticks through the jungle out of dread of wild beasts; as yet we have been totally unable either to prevent the fires, or to detect how they have commenced.

Jungle fires.

72. It is true that by concentrating all his efforts on one spot, Lieutenant Doveton was successful in keeping the fire out of the Boree Forest last year, and for this he deserves the greatest credit, as from the amount of dry timber lying felled there among the grass, it was a matter of special importance to do so; but it is well also to remember that operations of this sort cannot be carried on except at a very considerable expense and by having a number of men always at hand to put out any fire which may commence. This

at Boree was easy from the presence of the working Establishments in the Forest, but if large temporary establishments had to be entertained even for three months of every year in all Reserves, and even if they were successful at a large expense in keeping out fires for ten or even twenty years in succession, yet if at last in spite of all efforts to stop it, the fire were to get the mastery, every tree in the Reserve would have its bark injured and the good effect of the efforts of so many years would be neutralized, just as much as if no expense had been incurred in the matter at all.

73. There were some ingenious remarks published in the Forest records by Mr. Ashburner the Collector of Candeish in favor of jungle fires, and the Conservator of Forests in Bombay seems to admit the force of his arguments. Mr. Ashburner states that teak seeds sown where there had been no fires failed entirely to come up, while those sown in the ashes of the jungle conflagrations sprung up readily without any extra care. I think however that in any case the damage done by the fire was never supposed by Doctor Brandis to apply to the seeds, but rather to the young seedlings after they have sprung up. It is possible nevertheless that in avoiding one description of injury even to the seedlings, we may run into another, and that the fires may destroy many descriptions of insects, which if they lived would cause equal havoc to the young shoots. As a matter of fact the fires do not usually kill outright, but only scar the bark of the young teak plants. I believe also that if the fires did not take place the jungles would be far more unhealthy than they even are at present.

Boundaries of Reserves.

74. In the remarks on passing the Budget for 1866-67 it is observed by Government that there is a large expense sanctioned for marking off the boundaries of reserves which will not be required again, I would give a caution against the too ready acceptance of this, as in my experience the more the under-jungle is cut, down, the more thick and dense it will spring up again after each Monsoon, and there will be a considerable yearly sum required, if a clear path is to be kept round the bounds of each Reserve.

Plntations.

75. I regret that with the exception of the Garakottah Rumnah, where several thousand young teak plants have been planted out in parts of the Reserve from the Nurseries which I formed three years ago in the garden, as yet much progress has not been made in this important work in these Provinces. I have however put things in training for next year, by directing each Assistant Conservator at once to select suitable spots for plantations and to apply to the Deputy Commissioners of Districts for the land. Orders have also been issued for collecting next season 20 maunds of teak seed in each Division, so I trust that in the rains of 1867 a fair commencement may be made. Where it is possible the plantations will be formed on the banks of Rivers where the timber can be floated down to the markets.

76. In compact plantations we can have no difficulty in keeping down the grass and preserving the young plants from injury by fire and if the plantations were successfully started on a proper footing, I think much expenditure on Reserves might be profitably saved. I would strongly advise that if the Conservator himself should be unable to go there that one of the Assistant Conservators should be sent down to Madras to see the Nellambore plantation on the Western Coast, and personally make himself acquainted with the plan of operations which has been carried to such a successful result there. I am sure it would be a most prudent measure, and in the end result in a great saving of

money to Government, to be certain that we commenced our planting operations on a proper principle, and one which had been already proved to be completely successful. There are numberless minute details, on which perfect success must mainly depend which can never be ascertained by written communications. As I believe my connection, with the Forests of the Central Provinces is about shortly to cease, I am most anxious to be thoroughly understood as to the great importance which I personally attach to early attention to this matter—for I am persuaded that a good supply of cheap timber in future years must depend mainly on the judicious formation of teak plantations. The Nellambore plantation in Madras, though barely 20 years old, already yields a handsome Revenue to the Madras Forests.

Baubool plantations for Nagpore and Wurdah.

77. I think also that Baubool plantations should be formed all over the black soil plains of Nagpore and Wurdah. Wood is becoming very scarce there, as also in Berar, and these plantations require no care except such as is necessary to keep the goats and cattle out of them, and they might be entrusted to the Potails of villages under the District Officers. I have written to the Conservator in Bombay, who has promised to supply me with a quantity of Scinde Baubool seed for this purpose. These plantations must be made near the spots where the wood will be used, as they only will pay a fair return under such circumstances; but I am sure the formation of them would be a great boon to the people of these Districts.

Cinchona cultivation.

78. An abortive attempt was made to ascertain whether the Cinchona will flourish on any of the elevated plateaus of Central India. A case of plants was brought by an Officer from the Neilgherry plantations in the cold season of 1862-63, but though every care was taken of them, but few plants survived the journey, and the few that did reach their destination alive, died without attaining much growth. If an Officer from this Department were allowed to visit the Nellambore teak plantations during the ensuing rains he might at the same time devote a short time to the study of Cinchona cultivation at Ootacamund; and perhaps plants might be transferred during the rains from Ootacamund to the Central Provinces more successfully than in the cold season. The European Gardener who is now *en route* to join ought to be able to give us some advice and information on this matter.

Teak thinning.

79. This has been partially attended to this year. Some District Officers have attended to it without much success. But the fact is that the people have availed themselves of the Teak which was growing in the area of the village lands made over to them at the Settlement. Next year attention must be paid to this matter again, and in meantime with the sanction of the Chief Commissioner, the District Darogahs have been temporarily placed under the Assistant Conservators with a view to their being instructed in the right way of thinning teak saplings. This I think will have a good effect.

Measurement of trees to ascertain their growth.

80. As information as to the rate of growth of different sorts of trees is a matter of great importance, Assistant Conservators have been directed from time to time to measure and register trees of various ages and descriptions to ascertain their growth—sufficient time has not been allowed to elapse to ascertain the results of these measurements; and with a few exceptions I have been myself unable this year to re-measure the trees of which I possess previous measurements,

81. The following detail of trees however measured in the Residency compound at Nagpore may be interesting—

DESCRIPTION OF TREE.	Probable Age.	Measurement in October 1863.		Measurement in March 1865.		Average increase.	REMARKS.
		At 6 ft.	At 4 ft.	At 6 ft.	At 4 ft.		
		Feet in	Feet in	Feet in	Feet in		
1 Teak near North Gate ...	20 to 22 yrs	3 3	3 4	3 4½	3 5½	1½	
2 Siris North of House ...	55	8 2	8 7	8 2¼	8 7½	½	
3 Siris West of House ...	60	8 10	9 0	9 0	9 0	1	
4 Baubul on West drive ...	55	5 5	5 5	5 9	5 6	2½	I think there has been a mistake in the age of these trees, and that they are much less than reputed.
5 Ditto Ditto	55	4 9	4 5	4 10	4 7	1½	

Valuation surveys for ascertaining contents of Forests.

82. Among other work these surveys have not as yet been much attended to. Instructions shall be issued with regard to them, for if not actually required at the time it is useful that the Forest Subordinates should know how to carry them on, as they are no doubt useful for arriving at a somewhat approximate knowledge of what timber a Forest contains.

IV.—Selection of trees to be Felled, and Yield of Forests.

A. DIVISION.

Yield of Forests.

83. Lieutenant Douglas reports that many of the Teak trees girdled by Lieutenant Freeborn have not died. I conclude that this is on account of their not having been cut deep enough into. Of 1,770 trees which were thus girdled 539 were felled last year by the Department, and 50 Saul trees by Mr. Trimnell, a Contractor for the Public Works Department, there still remain 1,231 girdled Teak trees to be felled hereafter, as it was considered advisable to husband our best timber resources and in preference to collect unclaimed timber and Teak stumps which are lying about the jungles in danger of being burnt. During the past year 2,362 Teak logs of various sizes (including the above 539 trees) have been collected and stored from the Mundlah Forests, in addition to 5,375 poles and small pieces which had been previously collected at the Depôt—making a total of 8,737 logs of sorts in all. Of these 6,602 have been sold for Rupees 32,596-12-0 and 2,135 have been brought on stock at Goareeghat and will be sold immediately. The estimated value of the latter is Rupees 42,200 the best logs being still unsold.

84. Besides the above there are about 4,000 more logs collected in the Depots in Mundlah which will be floated down during the rains. From a desire to show only the work actually completed during the year under Review, these have not been brought on stock, and no credit has as yet been taken by the Department for them.

Timber to the Railway.

85. In addition to the above the following timbers have been supplied during the twelve months under Review to the East Indian Railway from the work done in Beejoragogurh during the two previous years.

Railway sleepers - - - - - -	6,769
Rejected do. for bridge centres - - -	1,500
274 logs in contents cubic feet - - -	5,842

The price of the above in addition to that of the timber which was given over previously to the Railway has been partly liquidated by them, and I trust will be soon finally settled. I have made a final proposition to the Chief Engineer as regards the price, which I believe is fair to both parties, and I trust will be accepted. If so there will be no loss on the value of the sleepers as estimated by Lieutenant Forsyth.

B. DIVISION.

Yield of the Forests

86. The following has been the out-turn of wood in these Forests. 80 confiscated teak logs which have been sold at the Deputy Commissioners of Raepore and Belaspore : 2,500 cubic feet of Saul sold to the Public Works Department. The above wood was sold altogether for Rupees. 6,200, of which 3,500 Rs. have been recovered, while the balance is still outstanding.

C. DIVISION.

Girdling operations and selection of trees for felling,

87. The only timber operations carried on have been those on the part of the sleeper Contractors, and the restrictions were removed in their favor by order on account of the urgent necessity for the speedy completion of the Railway, a requisition has been just received from the Public Works Department for 1,050 logs for the Kamptee bridge, and the Forests officers are now engaged in selecting the trees—but Mr. Jacob is very doubtful if the requisition can be fully met from these Forests, so greatly have they been denuded of large timber.

Yield of timber.

88. The following number of Railway sleepers have been taken from the Forests of this Division during the past year. Of which about 11,000 are debitable to the yast year.

Ramasawmy Modeliar	28,200.
Messrs. Lee, Watson and Aiton	16,400.
Bumselall Abeerchund	577.
Total Sleepers...	45,177.

Mr. Jacob states that the wants of the population generally have been entirely met from the unreserved Forests.

D. DIVISION.

89. The amount of timber taken out the Kaleebheet and Rajaburaree Reserves in the past year is 2,500 teak stumps. Out of these 419 have been supplied to the Assistant Commissioner of Hurdah for Rupees 2,177-8-0 while 1,607 have been measured and brought on Stock at a value of Rupees 9,500. These are now being carted to Hurdah for sale. The balance viz. 474 logs have not yet been measured up or brought to Depots and

no credit is taken for them. In the addition to the above. 40 logs of Jungle timber have been supplied to the Railway Contractors which were included in their general account with the Puchmaree Division.

E. DIVISION.

Girdling of trees to be felled.

90. Lieutenant Doveton's remarks on this subject are so valuable, and shew so much practical knowledge that I shall extract them in full

"Since my taking charge of this Division all trees to be felled in the Reserves by "Government Agency have been girdled. Teak was found to die very soon after the ope-"ration: Beejasal too died rapidly though it took longer than teak, but Saj whether girdled "in the cold or hot season did not die till after the ensuing rains; attempts were made to "kill kahoo trees by girdling, but these were utter failures; the bark growing over the "wounds on the first fall of rain. The trees girdled appear not to have been attacked by "insects, and, as a rule there have not been fires in the localities where trees were girdled."

"With reference to the girdling of teak. It seems to me that the process tends to "a certain extent to make the timber brittle. This was found to be the case with a num-"ber of trees which were girdled for some European timber merchant in the Boree Forest "prior to its being formed into a Reserve.* When these trees were felled by this Depart-"ment many of them were found to split and splinter in the fall, rendering some portion "of the timber quite useless whereas trees that are felled without being girdled do not "seem to be liable to injury of this kind. The Natives of this part of India seem never "to have practised the killing of trees before felling and yet *you find timber cut by them "more than a century ago as sound as if it had only been cut for a few years.* While "visiting the Kaleebheet Forest last year, I found in the old Fort there some pieces of "teak timber which had evidently been put into the building at the same time as the Ma-"sonry: they appeared to have been exposed to the weather for many years, but on being "cut were found as sound and fragrant as new timber."

Contractors

91. Lieutenant Doveton is of opinion that Messrs. Hood, Winton and Mills, who were the only Contractors felling timber in this Division, acted up generally to the terms on which they were permitted to do so: but he strongly urges the necessity, if possible, of not allowing any relaxation of the Forest Rules in future, in favor of Contractors.

Supply of wood to the Public Works Department.

92. The Executive Engineer at Mhow applied in March last for 6,000 logs of teak from this Division, but owing to the non-arrival of his Overseer to receive over the timber, the transaction could not be completed before 30th April and will not appear in this year's accounts. The wood is now in the course of being made over, partly from the logs at the Depots, and partly from timber still in the Forest. This order will use up the better portion of our present stock.

Depot at Bagra.

93. Lieutenant Doveton strongly recommends the formation of a large timber Depot at Bagra, near the Railway bridge over the Towah, on account of the long distance of the Boree Depots from the open country, and the dread which the inhabitants of the valley have of going into the jungles. This will be

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* These trees were girdled by Mr. Whittaker, a Contractor for Messrs. Duckett, and Stead in 1857-58."

especially profitable for selling small pieces of teak (loppings and toppings) for Carts, ploughs, and other agricultural purposes, which are now in a large measure wasted; while it will contribute largely to the convenience of the population generally. I have therefore authorized a Depot to be commenced at Bagra, during the coming rains, when the timber can be partly carted, and partly floated down to it. The cost of removal will I am sure be more than repaid by the enhanced price we shall get for the wood.

Supply of wood to the Railway

94. The supply of wood to the Railway having been nearly completed previously, only 693 logs and 2,672 sleepers have been taken by the Contractors during the past year. A few of our own sleepers have been carted to the line, but the work has been put off, as it will be done far more cheaply after the rains.

Outturn of timber during the year

95. Besides the above supplied to the Railway 39,493 Cubic feet of Teak and 100 cubic feet of Sheshum have been brought on Stock during the past year. But there is a large number of logs which, although they were collected, it was impossible to bring into the Depots and to measure up in time for this Report, and which therefore are not brought on the Stock account, and credit is not taken for them.

The following is the account of the years work in this division

Forest from which drawn.	Cubic feet of timber.	Description of timber.	Valuation.
Baitool Forests	12,486 C. ft.	Teak.	Rs. 13,478 „ „
Boree Forests	27,207 C. ft.	Teak & Sheshum	Rs. 35,154 „ „
Baitool (not measured nor included in Stock)	200 Logs.	Teak.	Rs. 1600 „ „
Boree (do.) ...	725 „	Teak.	Rs. 8700 „ „
Sleepers in Baitool...	1664	Teak.	Rs. 3328 „ „
Stumps in do. (not included in Stock)	1180	Teak.	Rs. 7080 „ „
Odd pieces	„	„	Rs. 237 „ „

The total value of the above amounts to Rupees 69,577-8-0 of which Rupees 52,197-8-0 worth has been measured up, valued, and brought on Stock.

The balance (of which the estimated value is Rupees 17,380) will when the measurement of it is completed be credited in next year's accounts.

96. Nearly the whole of the above is old and seasoned wood which was felled before the Forest Department was established: as Lieutenant Doveton has wisely avoided cutting new trees, in order to clear the Forests first of old logs.

97. I can say personally that it would be impossible to obtain better timber of its class than that which was supplied last year for the Hoshungabad Jail. Much of it that I saw cut up there was nearly the color of Mahogany.

98. Lieutenant Doveton thinks that there is still sufficient old timber left in these Forests to occupy the Department with the work of collection for 18 Months to come without further felling. It is a great matter to husband every foot of teak timber in the Central Provinces, or the present resources will not suffice to meet the requirements of the country, till the young timber, now growing up, becomes available; which I cannot anticipate under 20 years.

Old timber still remaining in the Forest

99. A fresh lease of this Forest has just been completed with the Thakoor and sanctioned by the Chief Commissioner, the Forest Department retaining the sole right of working and conservation and paying a seignorage of one Rupee per tree to the Thakoor for every tree felled. The sleeper work for the Great Indian Peninsula Railway was just being commenced, as Lieutenant Doveton's Report was sent in—want of men for the work, as well as the desirability of making a better agreement with the Thakoor than the one we had formerly, prevented it being begun before—Doctor Brandis' suggestions for the selection of trees will be strictly adhered to in this work.

Delakaree Saul Forest

100. The Reserved Forests in this Division have this year for the first time been opened to cattle, also for the collection of Mowah and other jungle fruits, as the grass was all burnt previously no harm can result from this, as the Forests are now all clearly marked off, and the Government right to them established, while a considerable increase of Revenue will be the result.

Leasing of privileges in the Reserved Forests.

F. DIVISION.

101. No work,

102. The total yield of the Forests during the past year is exhibited in the following return.

Return of Timber drawn from the Forests of the Central Provinces during 1865-66.

	Cubic feet Teak	Cubic feet Saul.	Logs Teak not measured.	Logs Saul & jungle not measured.	Teak stumps.	Sleepers	
						Jungle	Teak and Saul.
A. Division.							
By Forest Department	"	5,842	2,362	"	"	"	3,369
By Contractors	"	"	"	50	"	"	"
B. Division.							
By Forest Department	"	2,500	80	"	"	"	
C. Division.							
By Contractors	"	"	"	"	"	11,177	"
D. Division.							
By Forest Department	"	"	"	40	2,500	"	"
E. Division,							
By Forest Department	39,696	"	925	"	1,180	"	1,664
By Contractors	"	"	"	693	"	2,672	"
F. Division.		No Work done					
Total... ..	39,696	8,342	3,367	783	3,680	13,849	10,033

V. Management of the Unreserved Forests under District Officers.

103. This section will be divided into six heads agreeably to Chief Commissioner's Book Circular No. XLIII dated 23rd November 1865. It must be borne in mind that the year under Review is in many Districts the first year of the present system of management, and therefore comparison cannot fairly be instituted between it and the returns of previous years. Each District in each Division will be considered separately.

I. Leases of usufruct of unreserved Forests, and any facts of interest connected with such leases.

JUBBULPORE DIVISION.

District Jubbulpore.

104. Only 14 waste villages in this District were marked off by the Settlement Officer up to the end of 1864-65. These were let for the small sum of Rupees 360; since then 69 more tracts have been cut off from the Malgoozaree area, and next year a proportionate increase of Revenue under this head may be looked for.

District Mundlah.

105. The Deputy Commissioner reports that the Settlement operations in this District were not sufficiently advanced for him to lease out the waste lands; also that no Forest Darogah had been appointed. This latter want I have since remedied. But I must observe that until the waste leases be effected there must be a loss of Revenue to Government owing to the fact that all the building timber, firewood and other jungle produce required in the large city of Jubbulpore is obtained from the unreserved Forests free of all charge on it. This moreover is not equitable, as Nagpore and other cities in the Provinces have been heavily taxed, for these necessaries.

106. The main supplies for Jubbulpore are drawn from the Koondam jungles in the East, and the Burelah and Niwans pergunnahs of Mundlah; South-east of Jubbulpore. Large tracts here must have been cut off and placed in the unreserved Forests, as the country is a mere series of Hills covered with jungle. I would strongly recommend that the whole of the unreserved Forests in Burelah and Niwans of the Mundlah District be placed for purposes of taxation and conservancy under the orders of the Deputy Commissioner of Jubbulpore and his Darogah, as then they can then be leased out on one uniform plan under which they ought to realize a large Revenue. It is absurd that Jubbulpore should only pay 360 Rupees a year for its firewood and building timbers, while Nagpore pays at least 16,000 Rupees.

107. If this is not possible, the Deputy Commissioner of Mundlah should act in concert with the Jubbulpore Officer in making out leases of these Forests.

108. A tax was levied for about 20 days in June last by Lieutenant Forsyth who used his Goareeghat out-posts for this purpose, which, in that short time, realized Rupees 1,230-14-4 from which fact some idea of the advantages which would accrue to Government under this head if the measure I recommend be adopted. The Deputy Commissioner of Mundlah, appeared to consider that any tax except a very light one on Forest produce might bear hardly on the village people and prevent them bringing these necessaries into the towns for sale. But this has not proved to be the case in respect to Nagpore, Saugor or other places.

109. In this District Lieutenant Colonel Dennys has shown much energy in spite of great obstacles placed in his way by the old holders of unreserved lands, he has leased out his Forests for Rupees 7,661 2 8. The Total Revenue of the District this year amounts to Rupees 11,455 12 8. Next season the Deputy Commissioner hopes to realize a much larger Revenue. I have appended Colonel Dennys' Report in original for reasons stated hereafter.

District Seonee.

110. In this District there are 269 tracts of waste land. These have been leased out by Mr. Read, who has taken much interest in the Forest management, for Rupees 6,795 8 0; besides which there is a Revenue of nearly 2,500 Rupees from other sources. In both the last named Districts the results are most satisfactory.

District Dumoh.

111. In Saugor there have been marked off 272 blocks of unreserved Forests. All these have been defined by boundary pillars by Lieutenant Colonel Maclean. It would be well if this had been accomplished fully in all the Districts. The amount collected from the lease of unreserved Forests was Rupees 5,620 2 6. Colonel Maclean reports that this system of leasing works well. There are in addition to the above Rupees 1,218 6 9 for various miscellaneous forest collections making a total of Rupees 6,838 9 3. There is a balance uncollected of Rupees 1,054 which will be got in by June and credited in next year's accounts. The result in the District are exceedingly good, and I have to thank the Deputy Commissioner for the attention he has always shewn to Forest interests.

District Saugor.

112. On the condition of the unreserved Forests in Seonee and Chindwara, Mr. Jacob reports favorably. He states that generally the Forest regulations are well attended to, and that the condition of the timber is rapidly improving giving promise of an ample supply of useful wood for the future wants of all classes of the population, if care is taken of the trees. This is satisfactory. Mr. Jacob considers that the people are daily becoming better able to understand and appreciate the real object of Government in conserving the Forests, and that though they may have at first fretted under the restrictions imposed on them, the fact that the Rules are so seldom infringed, proves that they are both aware of the privileges which they still possess, and that there is no real hardship entailed by the Forest Regulations.

Assistant Conservator's remarks on condition of the unreserved Forests

General effect of the Forest Rules.

113. In Saugor and Dumoh, Lieutenant Douglas observes that the unreserved Forests have been generally properly demarcated, and the Deputy Commissioners have carefully looked after the Forest interests entrusted to them. A Division also of the Jubbulpore unreserved Forests has been made, which has nearly quadrupled their area, and it is hoped that next year a more satisfactory result may be obtained from them than during the present year; which remark also applies to the Mundlah District.

Goareeghat Bungalow.

114. The Goareeghat Bungalow has been re-thatched during the past year and is now in good order.

Chutteesgurh Division.

115. This Division consists of the three Districts of Raepore, Belaspore and Sumbulpore. The bulk of the unreserved Forests in this Division belongs to Zemindars. This fact, combined with the distance of a market for the produce, renders it unlikely that there will be any Revenue of importance derived from the tracts which remain to

Government, except where Waste Lands are taken up for agricultural purposes. In Raepore the lease of Government Wastes has been let for 1866-67 for Rupees 325 which is a sort of beginning. In Sumbulpore nothing has been obtained, and nothing is likely to be got; in Belaspore the Deputy Commissioner expects a Revenue during the coming year of about 1,000 Rupees from Government Wastes, as there is a great demand for firewood and building timber in the highly cultivated plains of Kulowtie, which cannot be entirely met from the Zemindaree lands.

Remarks by the Assistant Conservator.

116. Lieutenant Plowden reports on the "most decidedly bad" condition of the unreserved Forests in the Chiefships or Zemindarees of this Division, and expresses his opinion that unless a District Darogah is appointed to prevent the wholesale cutting down of undersized Teak Wood "matters will go on till they become much worse." And that if proper arrangements were made, a large Revenue ought to be obtained from the unreserved Forests.

117. He states that upwards of 600 cart loads of undersized Teak have come into Raepore, and that two men named Poorna Chowdree and Kishen Ram Narrain, are the chief culprits. He states this wood is cut at the foot of the Juglee Pahar.

118. All this is diametrically opposed to the statements both of the Commissioner of the Division and of the Deputy Commissioners. The Deputy Commissioner of Raepore, distinctly states in his report that it would not pay Government to entertain a Forest Establishment for this District, on account of the enormous amount of timber in the Zemindaree lands, and the distance generally of the Khalsa Forests (which have not been reserved) from any market. I cannot attach any full weight to Lieutenant Plowden's remarks on this subject in face of their statements.

119. As regards Lieutenant Plowden's complaints against the Executive Engineer, I beg to state that in consequence of the complaints from the Public Works Department that they could get no timber either from Lieutenant Plowden or from Contractors. I gave permission to Mr. Bell himself to remove the Saul trees which had been girdled last year in the Kumtoora Nullah, Lieutenant Plowden having failed previously to do so, and his excuses for failing (such as that his Elephant had been strained, the harness broken, and the logs too large and heavy) not appearing to me satisfactory.

Nerbudda Division.

District Baitool.

120. The Report forwarded by Captain Twyford is so replete with interesting details, as well as valuable information that I have forwarded it in original with this Report. If similar details in future years were furnished by all Districts, much real information as to the working of the leases of Unreserved Forests, as to how they bear on the general prosperity of the country, as well as with reference to the old holders of the land, would be obtained. The Revenue derived in Baitool for 1866-67 is Rupees 9,341-13-0 nearly the whole of which is derived from these leases.

District Nimar.

121. In this District the Waste lands were leased out for eight months of the past year for Rupees 4,982-0-0 which is on the whole satisfactory, though the Deputy Commissioner is sanguine on obtaining a much larger sum next year. The whole Revenue amounts to Rupees 11,352-4-0 against Rupees 6,795 of the previous year; of which Rs. 2,680 are uncollected.

District Nursingpore.

122. In this District there are little or no Forest. It draws its supplies of firewood, and timber, principally from Seonee and Dumoh. There have however been leases granted for portions of jungle land cut off in 92 villages, amounting to Rupees 1,231, while the total Revenue is Rupees 1,331, against nothing in previous years.

District Hoshungabad.

123. The Unreserved Forests in this District were let this year for Rupees 10,648-0-0. The Deputy Commissioner thinks that the present plan of leasing the Unreserved Forests is the best that can be devised. The total receipts in the year under Review were Rupees 14,066-1-6 or Rupees 3,577-1-6 in excess of the previous year. Mr. Beddy remarks that as a general Rule the tracts were farmed by persons who held villages in their vicinity.

District Chindwara.

124. In this District the Deputy Commissioner has pursued a totally different plan to that followed any where else. He appears to have made a sort of summary settlement with the proprietors of the villages, to which the Waste lands adjoin, at the rate of one anna an acre. As the period of lease was only for three months, the actual sum taken was three pies per acre, and the result financially is good, as Rupees 4,164-12-0 was obtained for three months up to 30th June, of which Rupees 3,327-6-6 were realized up to the end of the Financial year. Major Ashburner seems to think this plan preferable to selling the tracts by auction as he received only one bid of Rupees 2,500 from a Mahajun for the right to the same privileges for which he has made arrangements with the neighbouring landlholders for Rupees 4,164-12-0, and he thinks that they will always be ready to take the Waste lands at from 6 to 9 pies per acre per annum.

125. This system may possess without doubt some advantages, but at the same time it involves a new principal, and if adopted, it might lead to difficulties of a new character altogether. These lessees might get the idea that they have *a right* to lease particular Waste lands which at the Settlement they claimed, but to which their claim after enquiry had been rejected. Such an idea ought not, it would seem, to acquire sanction by prescription. Besides this, if they are willing to agree to a Summary Settlement what can prevent them from bidding at Auction for the same privileges.

126. Major Ashburner also proposes to give into the hands of certain respectable Malgoozars blank purwanas ready signed and sealed for filling timber, with power to them to fill up the amount of timber to be felled, and the names of the fellers, as well as to realize the duty ; a practice which cannot help leading to endless abuses, as far as I am able to judge. There should be no necessity for such a course. The applications to fell timber of the prohibited sorts are exceedingly few in number, as a higher rate of duty is charged on them than on the other descriptions of timber, many of which answer the wants of the people equally well, and which can be obtained without special permission.

127. I have appended Major Ashburner's report in original in order that his plan of leases may be clearly understood, and that its merits may be judged by the Chief Commissioner.

Remarks by the Assistant Conservator on the Unreserved Forests.

128. Lieutenant Doveton remarks that many complaints have been made in the Baitool district as regards the leasing of the Unreserved Forests. Many of these he considers frivolous, but some of them he thinks are not without foundation. They chiefly relate to matters of detail, such

as the size of chucks, and right of access to water for cattle. He is in communication with the District Officer on the subject, and the difficulties will all doubtless be rectified, as in due course they manifest themselves. The rates of duty are not objected to.

NAGPORE DIVISION.

District Nagpore.

129. The District Officer is of opinion that the only plan possible for the management of the unreserved Forests of this District is to lease out the usufruct yearly. During the past year the duties have been realized by posts established on the various roads leading into Kamptee and Nagpore and the amount thus realized has been Rupees 16,417-14-8. But it would be both impolitic and unjust to continue this plan as it imposes a duty on all produce from the private Jungles attached to villages as well as to the Government wastes, and now that the firewood Reserve North of Nagpore has been demarcated, there can be no further necessity of keeping up the posts. There is an apparent falling off on this head from the previous year's collections of Rupees 4,835, but as Lieutenant Forsyth remarked in his Report for last year that about 8,000 Rupees of the sum shewn as collections in Nagpore should in reality have been credited to Seonee and Chindwara, this would not be a fair comparison, and there is in reality an increase of about Rupees 3,400 during the year under Review in Nagpore, while there is a clear new Revenue of Rupees 12,000 in the other two Districts.

District Chanda.

130. The receipts from this District are very good, considering that the progress of the Settlement has not allowed all the unreserved Forests to be leased out; great progress may be looked for next year, as Chanda has much jungle on the borders of Nagpore where the Forest produce will always fetch a good return. The Revenue this year of Chanda is Rs. 8,393-0-9 against Rupees 8,459-7-5 last year, also there are 1,561 Rs. due by the Department Public Works.

District Wurdah.

131. The Deputy Commissioner of Wurdah has furnished a very interesting Report. This is the first year that this District has given any Forest Revenue at all, as the Deputy Commissioner's remarks on the unreserved Forests are valuable, I have forwarded his Report in original, and it will speak for itself. The amount realized for the year amounts to Rs. 4,973-0-0.

District Bhundara.

132. The Forests in Bhundara have hitherto been confined to the Zemindaree lands, and have yielded nothing to Government. The total Revenue of the present year exclusive of Grazing dues was Rupees 1,668-7-3 against Rs. 2111-14-9 last year; but there has been a large amount of excess waste to which the claim of Government has been asserted by the Settlement Department, the papers connected with which have only just been received by this Office. I have addressed the Deputy Commissioner on the subject of letting out these wastes for next year. It will, it is hoped, be possible to take up the best portions of them as Forest Reserves; but it may be confidently expected that next year a considerable Revenue may be realized from the unreserved Forests of Bhundara.

District Sironcha.

133. Captain Glasfurd reports that up to the present, with the exception of one tract from which the station of Sironcha draws its supplies of firewood, he was unable to lease out the usufruct of the unreserved Forests, owing to the fact that there is no market for the produce. In the Budrachellum and Rakapilly Talookas however, now that the right to excess of waste has been decided in favor of Government, he hopes to lease out the usufruct with advantage next year.

134. The total amount realized this year is Rupees 2,786-8-0 ; but the Deputy Commissioner considers that it may be well doubled next year, especially as the Government right to the excess wastes in Budrachellum and Rakapilly has been decided. There are also Rupees 2,200-0-0 due by the D. P. W. for fuel supplied to Steamers on the Godavery.

Remarks by the Conservator.

Remarks on the present system of leasing the unreserved Forests.

135. Nearly all Deputy Commissioners speak of the difficulties placed in the way of leasing the unreserved Forests by the landholders who have labored under the impression that they would be allowed to collect the Forest dues and graze their cattle without paying separate duty. This difficulty Mr. Read met in Dumoh by placing some tracts under Kham management with apparently satisfactory results. There can be no doubt, however, that a system of leases is far less objectionable for many reasons, and it would be desirable if all Deputy Commissioners would, in future Reports, note the number of tracts in each District taken on lease both by the neighbouring landholders and by other persons as has been done in the Baitool Report this year.

136. Information of this description would be most useful to enable some uniform system of letting these leases of unreserved wastes to be decided on. The Deputy Commissioner of Baitool appears to have taken exceeding pains in this matter in order to obtain the best possible results both for Government and for the District generally.

Rates of duty.

137. As regards the rates of duty fixed for jungle produce from the unreserved Forests and not to be exceeded by leaseholders, there appears to be a marvellous difference of opinion. The Deputy Commissioner of Jubbulpore thinks the rates are not too high and do not press hardly on the people ; those of Nursingpore, Chindwara, Hoshungabad, Dumoh, Baitool, entirely agree in the same, as well as Saugor. The Deputy Commissioner of Nagpore says the people certainly do complain of paying *a tax at all*, but find no fault with the *rates* except perhaps as regards grass and firewood, and the Deputy Commissioner of Sironcha thinks that the rates for grazing might be considerably raised with advantage : but the Deputy Commissioners of Seonee, Mundlah and Nimâr all urge very low rates of duty in the unreserved Forests, and Colonel Spence the Commissioner of Jubbulpore strongly supports their opinion. The Deputy Commissioner of Nimâr even states that he thinks that if any except right rates were imposed, the inhabitants of the jungle Districts might leave their villages.

138. I think myself that wherever there is any real cause of complaint among the people, it arises entirely from misconception, and from the state of the case not having been made known to them. No villagers in jungle tracts, should, under any circumstances, have to pay for grass and firewood *for their own use at all*, as in all cases they have their own village jungles to go to, where they can take it free for nothing, and it is no hardship to the cutters of firewood and grass *for sale* to pay a tax on what they take away *for purpose of sale ;* as they will recover it in the prices they demand. As regards Mundlah, I would observe that, I can hardly understand how the people can complain of the rates when no duty seems to have been levied in the District at all. The real fact, I believe to be, that in most cases where the rates are complained of, it is only as a sort of blind, and I believe the complaints will generally be found to originate with the neighbouring landholders who formerly realized some profits from the unreserved Forests ; which profits they cannot exactly acknowledge, but which have been curtailed by the stricter

administration of the Forests. It is *this indirect loss*, and not any *actual payments* which they have to make, which causes them to complain.

139. As to mode of assessing the duties, I am inclined however to think that even in the Government wastes it would be better not to fix any uniform rate of duty except for grass, and firewood, and perhaps building materials, which are necessaries, and on which any power of fixing the price by a monopoly should perhaps be prevented. If for instance a firm like that of Bunsilall were to buy up all the unreserved Forests round Nagpore, he might practically fix his own price for firewood and grass in that city as well as in Kamptee. For such articles then I would have something like an uniform rate of duty. For other articles of jungle produce such as Mowah, Chiroonjee, Gum, &c. I would have a sliding scale, according to variations of value as they are *bonâfide* articles of commerce, and might be well left to find their own level according to the market price. I believe that, for these, fixing of general or uniform rates would entail diminished Revenue to Government, and also would disorganize the market, and should be done away with. I would not even fix by any general or universal standard the rates for grazing cattle. as the value of the grazing rights materially differ in different localities, according to the natural advantages of the country in regard to grass, water, shade, and many other particulars.

140. I would recommend as well worthy of notice the remarks of the Deputy Commissioner of Baitool in the Report appended, which embody also the views of the Commissioner of the Nerbudda Division on this subject.

141. It is true that many complaints have been made to me by villages which own large herds of cattle, that they now have to pay more for grazing than they had to pay before the present system came into play. This is true to a certain extent ; but as no description of property has risen in value more than cattle have done in the last few years, I cannot myself see why the owners should not be justly called on to pay a tax, more strictly levied than before, when cattle did not fetch one fourth of the price they can command at present.

Calturable land in unreserved Forests.

142. I would remark also, that as there is much culturable land in the unreserved wastes, it might be well to fix the rates at which lease-holders may levy rent from cultivators. These rates might be left to the discretion of the various Deputy Commissioners to adjust from time to time, according to circumstances.

Date of leases to commence.

143. It would be as well I think that the same dates should rule in all Districts from which the leases of the unreserved Forests should commence. Myself I am of opinion that the 15th June or 1st July is a convenient date for the leases to commence from, as the payments may then be all collected in advance before 30th April without pressing too hardly on the lease holders ; though it would not be well that the leases themselves should actually begin from 1st May, as that would cut the Forest season in two, and entail much loss on all the parties concerned, as the arrangements for collecting the duty would be disorganized just when the Forest harvest was in full swing ; at present some Deputy Commissioners commence from 1st January, some from the 15th June, some from 1st July, a practice which in many respects is inconvenient.

Caution to lessees.

144. Care should be taken that lessees of unreserved Forests understand that a lease gives them no right *to fell timber for sale* as in places they seem to have done. The right conferred by the lease is only a right *to collect*

certain taxes on Unreserved timber, and on certain articles of Jungle produce; and if any wood or other articles are left in the Forest after the lease expires, they must pay duty to the new lessee, and the old lessee has no right to them whatever except after paying such duty.

Period for leases.

145. I have a strong conviction myself that it would be very advantageous to Government, if it could be managed without detriment to the sale of Waste lands, that longer leases should be granted in certain Districts. I do not see why three or five year leases should not be given in the more remote Districts, where land is so much less valuable than near the great lines of communication, and far less likely to be sold outright; Government, however, reserving to itself the right of selling the land *at any time during the period* of lease, and granting a compensation out of the proceeds of the sale in proportion to the profit realized above the upset price, for any improvements made by the lessee, which might be settled by arbitration. In parts of the country, there is much land which never can be sold for many years; but which will never be brought under cultivation on one year leases. There is no doubt that in remote places some villages were *purposely thrown out of cultivation* before the Settlement, in hopes of getting a more favorable assessment. The persons who did so have been justly punished for their fraud when the Settlement Officer refuses to grant them proprietary right in such land, and retains the control which had always belonged to Government. But it is not worth the while either of the old lessees, or of any one else, to spend money in collecting tenants to re-inhabit these villages, unless they can get a long lease, and so I know personally that many excellent villages in the more distant parts of the country are now lying entirely Waste, and unless they are bought outright (which at present is hardly likely) they will remain in the same condition. It would of course be very different (and I do not intend my remarks to apply) to parts of the country where the population is abundant and wealthy, and where land is valuable and will readily be bought up; but I speak of Districts like the valleys of the Towah, the Taptee, and the Deinwah, where land is abundant and the population poor and sparse. I fully agree with the Deputy Commissioner of Wurdah in his remarks on this point as far as they bear reference to his own District, although to me they do not seem applicable to other parts of the Central Provinces.

Insufficiency of District Forest Establishments.

146. Nearly all the District Officers complain of the total inadequacy of their Establishments to carry on the Forest work thrown on them by the new system. In no District are there allowed more than two or three Peons of the Regular Establishment in addition to the Darogah to carry out the multifarious duties connected with the Unreserved Forests. It would seem desirable that District Officers should be permitted to entertain and pay out of the proceeds of the Unreserved Forests such temporary establishments as they from time to time may require, which might be fixed from time to time by the Chief Commissioner, who can always command the opinion of the Forest Officers also, and that only the District Darogahs should be borne on the Regular Forest Establishment and paid by it. I believe that a moderate additional expenditure would assuredly bring with it a large increase of Revenue from the Unreserved Forests. It is impossible to suppose that one Darogah assisted by two or three Peons can carry out the Forest work of a large District, in addition to the management of from 200 to 500 blocks of Waste land and Unreserved jungles, as well as to supplying the wants of the agricultural population with building timber, thinning teak, and collecting duties, besides doing any miscellaneous work on which the District Officer may employ him.

II.—Permits given to Petty Dealers and Agriculturists.

147. The permissions granted under this head during the past year have been very few, and the amount of Revenue collected almost nominal. Most of the Deputy Commissioners Report " no permits granted." It must be remembered that these permits are only for the Reserved sorts of timber.

148. In Nursingpore there are reported 9 permits, in Baitool 12, and in Sironcha 12 permits. The reason of this, no doubt, is that the wants of the people were supplied from the unprohibited sorts of wood on which a lighter duty is payable, and also from the jungles given over to villages in proprietary right.

149. The Deputy Commissioner of Sironcha states that as the people can obtain the following sorts of wood.

Acacia Sundra (Khair.)
Soymida febrifuga (Rohnee.)
Chytia Collina (————————.)
Juga Xylocarpa (wood apple.)

in abundance in the Sironcha Forests, at the rates paid for unreserved timber, they do not care to apply for permits to cut the Reserved sorts of wood. If the Deputy Commissioner thinks that the above four sorts of timber will ever find a market beyond the limits of the District, I would certainly recommend their being placed on the Reserved list; while Kowah, Saj and some others, which do not attain to the same size in the Southern Forests as they do North of the Sautpooras, might be set free; but if it is only likely to affect the people of the country, I would not at present interfere with the lists as they now stand.

III.—Infraction of Forest Laws and the means taken to enforce their provisions; the aid rendered by the Police to the Forest Administration.

150. From the following return it will be seen that the amount of cases of breach of the Forest Laws is so small, that there can be no doubt, that they do not press too heavily on the people. The people everywhere seem now to have become acquainted with what is expected of them, and to yield a contented obedience.

LIST of Forest Offences tried before the Magistrates during the year 1865-66.

Division	Districts.	No. of Cases.	Results.	Remarks.
Jubbulpore.	Jubbulpore - -	2 Cases	Parties convicted and fined, none reported by the Police.	Some cases punished in Beejoragogurh by the Tehseeldar, as reported by Lieutenant Douglas.
	Mundlah - -	No Cases		
	Dumoh - - -	22 Cases	Punished under Section XXII Forest Rules.	
	Seonee - - -	No Cases		
	Saugor - - -	4 Cases		
Nerbudda.	Nursingpore - -	1 Case	Parties fined 100 Rupees, case brought up by a Malgoozar.	
	Baitool - - -	12 Cases	7. Brought up by the Forest Darogah, and 5 by the District Darogah. All the parties were fined or had other light punishments awarded.	List of cases in full in the Deputy Commissioner's Forest Report.
	Chindwara - -	21 Cases		
	Hoshungabad - -	2 Cases	But several others were punished as theft previous to the Act being introduced.	
	Nimâr - - -	No Cases		
Nagpore.	Nagpore - - -	No Cases		
	Bhundara - -	1 Case		
	Wurdah - - -	3 Cases		
	Chanda - - -			
	Siroucha - - -	2 Cases		
Chutteesgurh	Raepore - - -	No Cases		
	Belaspore - -	do		
	Sumbulpore - -	do		

151. It would seem from this Return that in some Districts more vigour was shewn in taking up cases than in others, but there is on the whole so little to complain of, that I would not press the comparison.

152. I perceive that in some Districts the Magistrates have been in the habit of crediting the Fines inflicted on Offenders to the Forest Fund. I believe that this is not legally correct, and that they should follow the ordinary course of all other fines, though undoubtedly there should be power to award a Moiety of the Fine to the party who brings the Offenders to justice. I think the District Officer should clearly understand this, as it will certainly add to the chance of breaches of the Rules being brought to light, and it would be desirable that explicit instructions should be issued on this Head.

153. I do not perceive from the Reports any cases in which the Police have been instrumental in bringing to notice infractions of the Rules; nor perhaps is such to be expected: but they have always rendered assistance to the Forest Officers when required.

IV. Working of the Forest Laws.

154. All the Magistrates report favorably on this head. I do not think any alteration is required; but I would strongly recommend that all Assistant Conservators should have the powers of a Magistrate for the punishment of Forest Offences and especially over their own establishments. It is at present doubtful if the smallest punishment inflicted by a Forest Officer on one of his subordinates is legal.

V. The service performed by the District Darogah and his Staff.

155. All the Darogahs who have been appointed seem to have done their duty fairly and given satisfaction. I have appointed a man to Mundlah where a Darogah was very much required, and have replaced the Jubbulpore Darogah by an older man who has been some time at the Goareeghat Custom house, and is therefore well acquainted with the resources from which the wood coming to Jubbulpore is drawn. I trust that with these arrangements a more satisfactory result will be exhibited during the coming year in this quarter.

156. Instructions have also been issued to District Officers with a view to render the Darogahs as useful as possible in ascertaining the wants of the population generally with regard to timber, and arranging for their supply, and I trust, as they become better acquainted with what is required of them, that these Darogahs, who now get very good remuneration for their work, will turn out a really useful class of men.

VI. Comparative fiscal result of the Forest Receipts.

157. As this is the first year that the unreserved Forests have been properly placed under the Deputy Commissioners, it is hardly fair to institute any real comparison between the Revenue of the past year and that of previous years; but I may say that on the whole, the result in a fiscal point of view has been satisfactory beyond our most sanguine expectations, and every District Officer reports that next year the Income will be very largely increased, when the system of leases is better understood by the people.

158. The table in the following section will exhibit the net Revenue produced by each District during the past year and also the preceding one.

VI.—Financial Results.

159. The following is the account of Forest Revenue for 1865-66 (Receipts and Expenditure) arranged according to the Headings in the Budget.

160.	To the Cash Receipts as shewn before viz. Rupees...	2,02,643	13	4
ADD	Outstanding debts due to the Department	71,987	1	10
	Timber in Stock, valued at Rupees	1,62,598	1	5
	Total of Assets ...	4,37,229	0	7

besides the dead and live Stock belonging to the Department.

161. But I must explain that of Rupees 71,987-1-10 quoted above as outstanding debts, two Bills for Rupees 43,006-14-6 were at the close of the year actually in our hands, and the amount only failed to be credited to Government before the 30th April from circumstances beyond my control: so the *real* balance outstanding at the close of the year was only Rupees 28,980-3-4 of which Rupees 7,633-0-0 are on account of the unreserved Forests.*

162. The value of Timber in stock is as follows:

A. Division	Rupees	59,770	13	5
B. Division	"	2,700	0	0
D. Division	"	7,322	8	0
E. Division	"	92,804	12	0
	Total Rupees	1,62,598	1	5

163. The outstanding debts at the close of 1864-65 amounted to Rs. 1,05,516 9 10†, of which Rs. 47,527 9 11 have been collected, and Rs. 57,989 0 10 still remain (nominally) unadjusted, and are included in the outstandings of 1865-66.

164. Of the Stock remaining at the close of 1864-65 valued at Rs. 81,051 8 0 timber to the value of Rs. 44,787 14 1 has been sold, and the balance, viz: Rupees 36,263 9 11 worth, has been credited to the stock now in hand.

165. The Cash Receipts then of 1865-66 are made up of the following items:

Outstanding debts	Rupees.	47,527	9	11
Product of Unreserved Forests	"	99,649	9	4
Miscellaneous Receipts	"	1,937	15	3
Timber sold	"	53,528	10	0
	Total Rupees...	2,02,643	13	4

166. The other Assets of the Department at the close of 1865-66 are as follows:

Outstanding debts of 1865-66 still due	Rupees.	71,987	1	10
Timber Stock of 1864-65 value...	"	36,263	9	11
Do. of 1865-66 value...	"	1,26,334	7	6
	Total Rupees...	2,34,585	3	3
Add				
Cash Receipts as above	"	2,02,643	13	4
Grand Total of Assets	Rupees...	4,37,229	0	7

167. The following Table will show both how far each Division and District has contributed to the above, and also what progress it has made since last year.

* One Bill for 40,000 Rupees was sent at my request direct to the Treasury Officer at Jubbulpore on 28th April by the Agent E. I. Railway. It was returned to Calcutta by some mistake of a Treasury Clerk who intended to send it to me for endorsement, which, however, as it was payable "to the Officer in charge of Forest Revenue, Jubbulpore" was not necessary. It was in consequence too late for the year's accounts. The other Bill was for Rupees 3,006-14-6, on Bombay, and could not be cashed in time also.

† In the last Report it was stated at 1,08,016-9-11 but Rupees 2,500-0-0 was on arbitration remitted against Messrs. Lee, Watson and Aiton.

COMPARATIVE Statement of Forest Receipts for 1865-66 and 1864-65.

		Reserved Forests 1865-66.						1864-65.					
A.—Division.	By Cash	46,928	4	3				9,565	10	1			
Lieut. Douglas	Stock	59,770	13	5				31,100	8	„			
	Outstandings	55,593	7	„	1,62,292	8	8	61,109	4	„	1,01,775	6	1
B.—Division.	By Cash	„	„	„				„	„	„			
Lieut. Plowden	Stock	2,700	„	„				„	„	„			
	Outstandings	3,750	„	„	6,450	„	„	„	„	„	„	„	„
C.—Division.	By Cash	25,867	9	„				7,947	4	6			
Mr. Jacob	Stock	„	„	„				9,104	4	„			
	Outstandings	2,003	4	4	27,870	13	4	20,339	5	4	37,390	13	10
D.—Division.	By Cash	2,224	9	„				1,754	8	„			
Mr. Cox	Stock	7,322	8	„				„	„	„			
	Outstandings	„	„	„	9,547	1	„	„	„	„	1,754	8	8
E.—Division.	By Cash	27,973	13	9				4,985	9	9			
Lieut. Doveton	Stock	92,804	12	„				40,846	12	„			
	Outstandings	3,006	14	6	1,23,785	8	3	26,568	„	6	72,400	6	3
F.—Division. Lieut. Noverre	No Receipts	„	„	„	„	„	„	„	„	„	„	„	„
	Total of Reserved Forests, ...				3,30,945	15	3				2,13,321	2	10

COMPARATIVE Statement of Forest Receipts for 1865-66 and 1864-65.—(*Continued.*)

UNRESERVED FORESTS.		1865-66.			1864-65.		
JUBBULPORE.	Cash Receipts	420	„	„	„	„	„
SAUGOR.	Cash Receipts 6,838-9-3 / Outstandings 1,054-0-0	7,892	9	3	2,682	11	4
DUMOH.	Cash Receipts	8,291	15	9	153	„	„
MUNDLAH.	ditto	1,588	„	„	„	„	„
NURSINGPORE.	ditto	1,331	„	„	73	„	„
BELASPORE.	ditto	4	„	„	„	„	„
SEONEE.	Cash Receipts 11,455-12-8 / Outstandings 138-8-0	11,594	4	8	4,370	„	„
CHINDWARA.	Cash Receipts	3,327	6	6	364	12	„
NAGPORE.	ditto	*16,417	14	8	21,253	15	„
HOSHUNGABAD.	ditto	14,066	1	6	10,487	„	„
NIMAR.	Cash Receipts 8,672-4-0 / Outstandings 2,680-0-0	11,352	4	„	6,795	„	„
BAITOOL.	Cash Receipts	9,341	13	„	2,752	„	„
BHUNDARA.	ditto	1,668	7	3	2,111	14	9
SIRONCHA.	Cash Receipts 2,786-8-0 / Outstandings 2,200-0-0	4,986	8	„	234	„	„
CHANDA.	Cash Receipts 8,393-0-9 / Outstandings 1,561-0-0	9,954	„	9	8,459	7	5
WURDAH.	Cash Receipts	5,046	12	„	„	„	„
	Total of Unreserved Forests Rupees ...	1,07,283	1	4	59,736	12	6
	ADD. For Reserved Forests, Rupees	3,30,945	15	3	2,13,321	2	10
	Grand Total, Rupees ...	4,37,229	„	7	2,73,057	15	4

* Of Rupees 21,253-15-0 credited to Nagpore in 1864-65, about 8,000 Rs. belonged properly to Seonee and Chindwara, so there is no real decrease, but an increase of 5,000 Rs. on the three Districts.

168. Under the Head of Expenditure for 1865-66 there stands debited to the head "Conservancy and Working expenses ... ... Rs. 38,504 2 4
and Salaries Rupees. ... ... „ 74,993 14 7
or Total Expenditure ... Rs. 1,13,498 0 11

169. The Financial result of the Forest operations of 1865-66 may therefore be thus shewn.

Cr.				Dr			
Cash Receipts of the year	2,02,643	13	4	Stock in hand at the beginning of the year ...	81,051	8	0
Timber in hand at the end of the year ...	1,62,598	1	5	Outstanding debts due do. ...	1,05,516	9	10
Outstanding debts due to the Forest Department end of 1865 66	71,987	1	10	Result of the Forest Administration of the year 1865, 66	2,50,660	14	9
Total Rupees ...	4,37 229	0	7	Total Rupees...	4,37,229	0	7

170. The total outstanding arrears due to the Department at first sight seems large, but if the debt due by the East Indian Railway, (a large portion of which has been in fact already liquidated) be deducted, the amount comes within more reasonable dimensions. It must be borne in mind also that in April and May when the Financial year closes, the Forest Officers are in the midst of their hardest Forest work, that timber sales are just going on, and that some allowance must be made for the difficulty of attending to office work at such a time, and for the delay in getting replies to their applications for payment. There are hardly any sums now outstanding which will not be adjusted as soon as the Forest Officers get into stationery quarters in the Monsoon. It is also at this very time that the timber is just coming into the Depots from the Forests, and is being measured up, and there will on this account always be a large amount of Stock on hand at the close of the Financial year.

171. The following is a list of outstanding debts due to the Department at the end of 1864-65.

OUTSTANDING DEBTS.

Due on account of Reserved Forests to Departmental Officers

DEBTS OF 1864-65.

1.	East Indian Railway - - - - - - - - ...	Rs. 51,865	0	0
2.	Department Public Works on account of Toplah Saul (balance).	„ 3,728	7	0
3.	Doongratal Forest lease - - - - - - - -	„ 958	5	4
4.	Messrs. Hood, Winton and Mills - - - - - - -	„ 1,437	4	6
	Total Rupees - - -	57,989	0	10

DEBTS OF 1865-66.

5.	Messrs. Hood, Winton and Mills - - - - - - -	Rs. 1,569	10	0
6.	Department Public Works, Raepore - - - - - -	„ 3,750	0	0
7.	Do. 2nd Division Great Deccan Road - - -	„ 1,044	15	0
	Total Rupees - - -	64,353	9	10

Due on account of unreserved Forests to District Officers.

8.	Due by D. P. W. Godavery Division, to Deputy Commissioner Sironcha. - - - - - - - - -	Rs. 2,200	0	0
9.	Do. Chanda to Deputy Commissioner Chanda. -	„ 1,561	0	0
10.	Due for leases to Deputy Commissioner Saugor - - -	„ 1,054	0	0
11.	Do. Do. to Do. Nimar - - -	„ 2,680	0	0
12.	Do. Do. to Do. Seonee - - -	„ 138	8	0
	Total Rupees - - -	71,987	1	10

172. Of these No. 1 has been liquidated in part already by the East Indian Railway, and Nos. 4 and 5 by Messrs. Hood, Winton and Mills in full.

No. 2 is under reference to the Chief Commissioner.

No. 3 is under appeal in the Commissioner's Court of the Jubbulpore Division.

With regard to No. 6 due by the Public Works Department at Raepore remaining uncollected, I consider Lieutenant Blowden extremely neglectful in having failed to recover the sum due on the only small sales of timber which he effected in his Division during the year.

No. 7 is due by the Executive Engineer of the 2nd Division Great Deccan Road for timber supplied to a contractor who has since levanted. I am in correspondence with the Executive Engineer as to the possibility of recovering this debt.

No. 8 is due by the Public Works Department at Sironcha, for fuel supplied to the Steamers on the Godavery.

No. 9 is also due by the Department of Public Works at Chanda. The non-payment of this, as well as the amount due at Sironcha, seems due to a misunderstanding on the part of the Deputy Commissioners as to the manner of adjusting payments with the Department Public Works by Transfer Invoices in lieu of cash payments. I must, however, state, that until the Reports came in, many of these debts were unknown to me, and I have since issued a Circular directing all Assistant Conservators to send to this Office, a monthly Statement of all sums due to their Division at the close of every month, as well as of outstandings realized during it. The Controller of Public Works Accounts has also desired all Executive Engineers to take the initiative in adjusting by Invoice all debts due by them to District Officers for timber, so I trust that, in future, all sums of money will not fail to be realized as soon as they become due.

Nos. 10 11 and 12 are small sums due by lessees of unreserved Forests, for the adjustment of which the Deputy Commissioners have allowed a little grace. They are partly collected already, and the rest will be realized very shortly.

173. I have addressed Mr. LeMessurier about the speedy settlement of the debt due by the East Indian Railway, and he has acquiesced in the rates which I have proposed subject to a verification of numbers. I therefore trust that there will be no more delay in the recovery of this balance.

174. As regards the large amount of timber in hand at the close of the year, I would beg leave to observe, that it must not be supposed that more wood has been brought from the Forests than can be readily disposed of. On the contrary, I have been careful not to force it on the market, partly with a view of husbanding our resources so as to be able to meet *known demands* which were likely to be come upon the Department, and partly with a view to obtaining the legitimate value of the timber. The principal amounts of Stock in hand is in the A and E Divisions. As regards the former, I have already far larger demands from the Railway for Station buildings than can be met from the whole stock, and Lieutenant Douglas is only waiting for the Executive Engineer 1st Dn. Great Deccan Road (who has a prior order on the Department) to state exactly what wood he requires in order to sell the remainder to the Railway Engineers, and as regards the Stock in the E Division, Lieutenant Doveton does not think that all the good timber he has in hand will be sufficient to meet the order for 6,000 logs of the Executive Engineer at Mhow, whose Overseer is at present engaged in measuring and taking over the wood. The inferior pieces I have directed Lieutenant Doveton to remove during the rains to the new Depot which is to be formed at Bagra, as they will realize a much better price there, than at the Depots in the Forests ; there being an immense demand for small teak for carts and other agricultural purposes in the Nerbudda valley.

175. In conclusion the following comparative statement of the actual Cash Receipts and Expenditure for the three years preceding 1865/66, will enable an estimate to be formed of the progress which has been made by the Forest Department in these Provinces.

Comparative Statement of Revenue and Expenditure.

		Receipts.	Expenditure.	Surplus.	Deficit.
1862-63 - -	Rs.	53,169	60,341	0	7,172
1863-64 - -	„	77,539	71,800	5,739	0
1864-65 - -	„	89,306	97,536	0	8,230
1865-66. - -	„	2,02,644	1,13,498	89,146	0

176. From the above it will be seen that the Income has more than doubled itself during the past year, and a reference to the Financial Statement will shew that this increase is due in nearly equal proportions to the Reserved and the unreserved Forests, as the former have risen including outstandings and value of stock from Rupees 2,18,321 2 10 in 1864-65 to Rupees 3,30,945-15-3 in 1865-66 while the latter have increased from Rupees 59,736-12-6 to Rupees 1,07,283-1-4 over the same period. It is true that part of this is for timber sold in the previous year, but the nature of our Forest operations will always cause the fruits of any year's expenditure to be found in the Income of the following one.

177. I confidently expect that Revenue of the unreserved Forests will next year rise to above a lac and a half of Rupees, and that the year following it will be even still higher. A steady Revenue of at least two lacs of Rupees may I feel certain be looked for from this source.

VII General.

178, Referring to para 12 of your Review on last year's Forest Report dated 23rd November 1865, I will briefly examine how far improvement has been effected in the points of Forest management which still, in the Chief Commissioner's opinion require attention and remedy. 1st *As to the demarcation* of *Reserves* during the past year, 8 New Reserves have been demarcated, and 2 are now in course of demarcation.

Review of last years Report

2nd. *The Mapping of Forest tracts*: these have been got ready by putting up easily seen marks for the Topographical Survey party whenever they may arrive. But as the Surveyors have not come during the present season, I cannot feel answerable as to how far the boundaries may be in a condition for Survey after the Monsoon, without a fresh clearing. It would be a great point gained if an Officer well acquainted with surveying were attached to the Department for one or two seasons to prepare these maps.

3rd. *The exploration of distant and unknown tracts of the Eastern Division.* fear that Lieutenant Plowden has not got through much real work in this way during the year. He has been unable chiefly from sickness to carry out the instructions given him by Lieutenant Forsyth, as well as those which I sent him on first assuming charge in March, and since then he has obtained a Medical Certificate to Europe. I regret also to state, that little or nothing has been done by Lieut. Noverre from the Chanda side, as he remained in Nagpore, partly through sickness, and partly on the plea of printing off Photographs of the Exhibition during the whole of February and nearly all March, thereby losing the best and pleasantest months of the year for exploring purposes. He is now engaged in exploring in the direction of Panabarus.

If a sensible and active Forest Officer were appointed to the joint charge of the Southern and Eastern Divisions for exploring purposes, I think that the pay of one Assistant might be well devoted to procure a good Surveyor to prepare the Forest Maps, without which, I despair of their ever being accomplished.

4th. *The prompt realization of all Forest dues.* This is a matter to which every attention has been given, and not without effect, as it will be seen that there is only a real balance of Rs. 28,980-3-4 due at the end of the present year under Review, against Rupees 1,05,516-9-10 at the conclusion of the previous year. The Department of Public Works are still in debt for the money due on account of the Toplah Saul, while they also owe a balance of Rupees 2,200 to Captain Glasfurd for firewood supplied to the Upper Godavery works, and 3,750 Rupees for timber in Raepore. The two first cases are both under reference, and I trust will soon be adjusted. Besides the above, there are no unadjusted balances of importance, except that of the East Indian Railway regarding which, I am in correspondence with the Chief Engineer.

It must be ever remembered that the end of the Financial year just occurs as we are getting the timber to the Depots, and arranging for the sale of it. An overplus of stock and some outstanding balances will ever be the result of this arrangement. As it is, the timber drawn from the Forests in one season, is usually sold either just at the close of the same Financial year, or at the commencement of the next one, and in order to obtain a true idea of the financial condition of the Department, the results of at least three years in succession should be taken together; and not the actual receipts, and expenditure, of a single year.

5th. *The reservation from sale under the waste sale Rules of all good Forest lands.* I have applied to the Deputy Commissioner of Hoshungabad for two plots of land under the Puchmurrees on the Towah and Sonebudr Rivers on this account, for the purpose of forming teak plantations, and the Settlement Officer in Bhundara informs me that he has cut off some good Forests in the Lanjee Hills, and as soon as I get the maps from him, I shall be able to judge if a Forest Reserve is likely to be formed with advantage in that quarter, and I will direct Mr. Jacob's attention to the points where I think it probable good timber may be found.

179. On a review of the above statements I trust that the progress of the Forests may appear satisfactory to the Chief Commissioner, and I trust that it may not appear out of place if I here pay a tribute to the zeal and ability displayed by Lieutenant Forsyth, who has acted in the appointment of Conservator in my absence, and who held charge of the Department for 10 out of 12 months of the year under report. The whole Department has been newly organized by him on a good sound working footing, and if the different portions of it work together in harmony, so that results satisfactory to Government have been produced, it is to Lieutenant Forsyth's judgment and good sense both in arranging and in carrying out the changes that have taken place that such results must be mainly attributed. Little now requires to be attended to in order to keep the machine going, provided the subordinate Officers will pay attention to the rules that have been laid down for their guidance, and above all do not allow their accounts to fall into arrears.

Services of Officers.

180. Of the efficiency of the Subordinate Officers, the Chief Commissioner will best be able to judge from the details in this Report, and the work shewn in their respective Divisions. But I may say that Lieutenant Doveton

seems fully to have kept up his high character as a Forest Officer, having excellent results to shew in his Division; although two of his Darogahs were sick for several months of the year, and he had many difficulties to contend with from the cattle plague. Lieutenant Douglas also has worked equally well. He has been out in the Forests without intermission during the whole of the season, and has brought down a very large amount of timber, which is now greatly wanted for the Public Works and Railway buildings at Jubbulpore. I am very much satisfied with the energy which Lieutenant Douglas has displayed during the past year, and the good results which have ensued from it. Mr. Jacob has done well in other ways, and is a capital Forester, hard-working, zealous, and thoroughly to be depended on for his good judgment and discretion, although necessarily his Division cannot yield such results (financially) as the two first named ones. All these three are excellent Forest Officers. Mr. Cox appears most willing and anxious to do his best. He was laid up for at least six weeks by a bad accident, and other circumstances have stood in his way this year. But he has been out hard at demarcation work during the last two hot months, and I look confidently to his Division shewing good results next year.

I am sorry that I cannot say, I consider either Lieut. Plowden or Lieutenant Noverre's services equally satisfactory.

181. To the District Officers I must tender my best thanks for the interest they have taken as a body in Forest matters, and for the assistance, and information that they have ever afforded me in carrying out my duties. The success of the plan of placing the unreserved Forest under their charge must be apparent, from the results which have been obtained. Captain Twyford in Baitool and Colonel Dennys in Seonee, Colonel Maclean in Saugor, Mr. Read in Dumoh and Mr. Jones in Wurdah, have taken especial interest in Forest matters, and I have to thank them for furnishing valuable Reports, containing much useful information on their District Forests.

Services of Subordinates.

182. The Native Subordinate Department have, on the whole, worked well. Lieut. Douglas reports well of Mooneer Khan and Shekh Mohideen in the A. Division, and Lieut. Doveton of Sheikh Ahmeeth and Mahomed Padsha in the E. Division, but Mahomed Padsha has suffered severely from constant illness during the past year. Lieut. Douglas also specially notices the Tehseeldar of Beejoragogurh, and states that the Forests have materially benefitted by the interest he has taken in them, and the assistance he has rendered in that quarter to the Department.

183. The following documents accompany the Report :—

A.—Map of great Reserve on the Sautpooras.

B.—Valuation Survey of Garakottah.

C.—4. District Reports viz.

Baitool.
Wurdah.
Seonee.
Chindwara.

D.—Statement of Revenue and Expenditure.

E.—Stock Account.

I have the honor to be,
Sir,
Your most obedient servant,
GEORGE F. PEARSON, MAJOR,
CONSERVATOR OF FORESTS,
Central Provinces.